

CAMPBELL'S
NEW REVISED
COMPLETE GUIDE



AND
DESCRIPTIVE BOOK
OF THE
YELLOWSTONE PARK



GREAT FALLS OF THE YELLOWSTONE.

CAMPBELL'S

NEW REVISED

COMPLETE GUIDE AND DESCRIPTIVE BOOK

OF THE

Yellowstone Park

By REAU CAMPBELL

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1909

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Preface

“GOOD wine needs no bush” and a good story no commending when only the telling of it may have its faults. This one is not a garland of others’ posies with the thread that binds them only mine own; the posies and the thread are mine, gathered and bound where I found them, on the hills and in the valleys of a land that is the Wonder of the World.

The facts and figures, as a matter of course, come from the writers of history, from the archives of State, and from diligent research among contemporaneous habitats of the Yellowstone National Park. If any error has crept in I shall promptly charge, first, my secretary, second, the printer; if these two prove not guilty, I promise to correct and not let it occur again.

Perhaps the word “Descriptive” in the caption of this book is a misnomer, for who shall describe the wonders of a geyser like Old Faithful, or paint the beauties of the Grand Cañon? Talmage with all the eloquence of his soul acknowledged the hopelessness of the task, and Moran put down his brush in despair.

The Guide book is the easier task, and of more importance. What I have written here is after the experiences of more than a score of journeys through the Park, journeys not of the five-day sort, but with leisurely travel and long stops that I might see some of the greater glories that are not on the beaten track. And I have not been disappointed.

It is said that “The gentleman from the South is never in a hurry,” and it behooves those from the North, East and West to emulate his example when they come to the Park. Rome you may do in a day, but not the Yellowstone Park.

I have set down naught in exaggeration; you may say that there is color to my story. I found the color in the flowers that bloom, in the translucent

pools, in the blue sky and the blue mountains with a line so faintly drawn between till we can hardly discern where one begins and the other ends, and in the mass of color in the grandly beautiful Cañon, and in the lakes there's color, but you may be color blind. It was intended to put the illustrations in color, but the hopelessness of accuracy compelled the adoption of halftone.

The wonders of the Geysers are enumerated and their peculiarities noted, that's all. The schedules of eruption, except as to Old Faithful, are not guaranteed, but the figures are as accurate as is possible to obtain; descriptions are out of order. At the first view, the height of water thrown seems a thousand feet instead of an actual hundred. I am under obligations, and my thanks are due and sincerely given to every one who has had to do with the Yellowstone National Park, from President Jefferson and John Colter to Colonel Chittenden and Harry Child.

REAU CAMPBELL.

CHICAGO, 1909.

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The Illustrations

are engraved from photographs furnished by those named below. The figures denote the page on which their respective pictures appear.

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S. W. Matteson, Minneapolis, Minn., Frontispiece, 20, 23, 24, 26, 27, 29, 30, 32, 35, 36, 39, 40, 43, 46, 48, 54, 62, 63, 64, 65, 67, 68, 74, 75, 77, 78, 82, 83, 85, 86, 87, 88, 89, 91, 93, 94, 103, 121, 126, 127, 140, 150, 158.

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Northern Pacific Ry., St. Paul, 9, 10, 11, 21, 22, 136, 145, 150, 165.

Woodward & Tiernan Co., St. Louis, Map of the Yellowstone Park.

Yellowstone Park Association, 28, 31.



Historical

TO begin at the beginning, Thomas Jefferson, President of the United States of America, is responsible to the people thereof for their ownership of the Yellowstone Park.

During Mr. Jefferson's term of office, 1801 to 1805, the Louisiana Purchase was negotiated and concluded, and it should be remembered that, at that time, all that portion of the Yellowstone Park north of the Lake was in Louisiana and belonged to France; south of the Lake the territory belonged to Spain and was a part of Mexico.

The Louisiana Purchase cost the United States \$15,000,000, and after the Mexican war in 1847 Mexico was paid \$15,000,000 for all her possessions north of the Rio Grande River, so we may say that the Yellowstone Park cost the United States \$30,000,000, with all the territory from the Mississippi River to the Pacific thrown in for good measure.

Napoleon of France did not know what he was selling, and Mexico was not in a position to dictate prices, and it seems that fifteen millions were popular prices in those days to pay for empires. A single county of Texas or a parish



of Louisiana is worth more than fifteen millions now, and Old Faithful alone would bring a large percentage of that price.

Thus the territory in which the Yellowstone Park is located came into the possession of the United States partly in 1803 under the administration of President Jefferson, and completely in 1847 under President Tyler. As early as 1792 Jefferson had formulated his plans for an exploration of a route to the Pacific through the Northwest and was preparing to put them into execu-

tion, but it was not till 1803 that Congress was induced to make the munificent appropriation of \$2,500 for the expedition, and only after a secret message from President Jefferson, because the route of the explorers would take them through territory of a foreign power (France).

This was the origin of the Lewis and Clark Expedition that left St. Louis May 14, 1804, and arrived at the mouth of the Yellowstone River, April 26, 1805. We are not to write here the history of that famous expedition nor that of its heroic members, but it is *apropos* to note the niggardly appropriation of Congress (same as in later years) and compare it with the wide open letter of President Jefferson to Captain Meriwether Lewis.

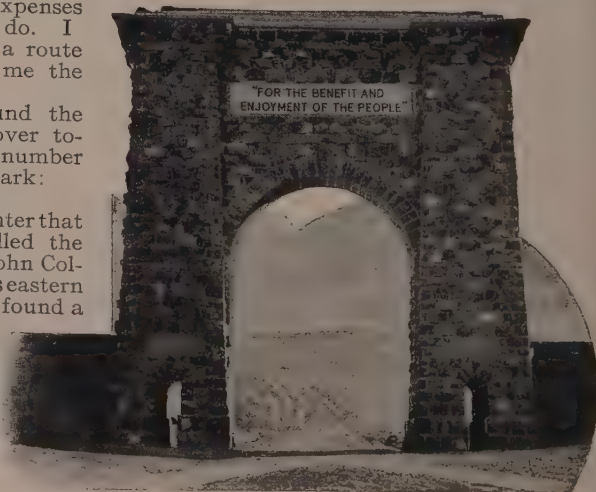
The letter on following page from President Thomas Jefferson to Captain Lewis explains itself

There is no limit to expenses or directions what to do. I seems to say: "Go, find a route to the Pacific and send me the bill."

They went, they found the route that is traveled over to-day, and one of their number found the Yellowstone Park:

JOHN COLTER!

The first white man to enter that land of wonders now called the Yellowstone Park was John Colter, who passed through its eastern borders in 1807, where he found a "tar spring" and the "Stinking Water;" the tar spring is called "Colter's Hell" to this day, but the "Stinking Water" fortunately became the Shoshone River.



Dear Sir

Washington US of America July 4 1803.

In the journey which you are about to undertake for the discovery of the course and source of the Mississippi, and of the most convenient water communication from thence to the Pacific ocean, your party being small. It is to be expected that you will encounter considerable dangers from the Indian inhabitants should you escape those dangers and reach the Pacific ocean, you may find it imprudent to hazard a return the same way and be forced to seek a passage round by sea in such vessels as you may find on the Western coast but you will be without money, without clothes & other necessaries as a sufficient supply cannot be carried with you from hence your resource in that case can only be in the credit of the US for such purpose I hereby authorize you to draw on the Secretaries of State of the Treasury of War & of the Navy of the US according as you may find your draughts will be most negotiable. for the purpose of obtaining money or necessaries for yourself & your men and I solemnly pledge the faith of the United States that these draughts shall be paid punctually at the date they are made payable. I also ask of the Consuls agents merchants & citizens of any nation with which we have intercourse or amity to furnish you with those supplies which your necessities may call for, assisting them of honorable and prompt retribution, and our own Consuls in foreign parts where you may happen to be, are hereby instructed & required to be aiding & assisting to you in whatsoever may be necessary for procuring your return back to the United States And to give more entire satisfaction & confidence to those who may be disposed to aid you I Thomas Jefferson President of the United States of America have written this letter of general credit ^{for you} with my own hand and signed it with my name

Th Jefferson

To
Capt Meriwether Lewis



IN 1803 THE YELLOWSTONE PARK WAS OWNED BY FRANCE AND SPAIN.

Colter was a member of the famous Lewis and Clark Expedition which started from St. Louis in 1804. He continued with them till after they had returned from Oregon as far as Fort Mandan, where he applied for and received permission to remain in that country to engage in trapping; this was in August, 1806. He was supplied with ammunition and set out into the wilds, while Lewis and Clark returned to St. Louis.

Colter remained until the spring of the following year when he started out alone for St. Louis, floating and paddling down the river in a dugout, a canoe hewn from a log. At the mouth of the Platte River he met another



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NORTHERN PACIFIC STATION AT GARDINER.

expedition bound up from St. Louis for the fur country under a trader named Manuel Lisa.

So fascinated was Colter with his life in the wilderness that it was not a difficult matter for Lisa to persuade Colter to join the expedition, which he did, and he turned his back upon civilization for the second time. On arrival at their destination Colter was sent to notify the Indians, the Crows and the Blackfeet, of Lisa's coming.

Colter traveled with a company of Crows far into the mountains and along the streams of the headwaters till one day they came upon a band of Blackfeet and of course there was a fight in which the Blackfeet were defeated. Colter remained with the Crows as long as he dared, then started out alone to return to Lisa's camp. Colter knew if he went to the camp by the way that he came he would meet the Blackfeet again, so he took another route

and in so doing came upon the "stinking water" and the "tar spring," and discovered the Yellowstone Park.

But Colter, nor yet Lewis and Clark, cannot be fully credited with the discovery of the Yellowstone River, but they were the first Americans to find the river. The French and English fur-traders were among the Mandan Indians almost ten years before the arrival of the Americans and they knew of a river called by the Indians "Mi tsi a da zi," which being interpreted means Yellow Rock River, and which the French called *Roche Jaune* and the English Yellowstone in 1797, and from that time to this day, every explorer noted the yellow stone in the walls of the cañons and by the wayside.

What John Colter discovered remained unexplored for more than half a century.

If the Indians knew of anything even bordering on the wonders of the Park they didn't say anything about it, either from a superstitious fear or other reason best known to themselves; and Lewis and Clark passed on to the west and returned to the east without even hearing of a geyser, as did others in later years pass to the north, east, south and west without knowing what they were leaving undiscovered to the world, that now acknowledges this to be the Wonderland of the Earth.

Even John Colter did not see all of the Park, as a great many people nowadays do not, but he was the real discoverer of the region that all the world is contemplating today.

As Columbus was credited with the discovery of America because he found Cat Island, I say that John Colter discovered the Yellowstone Park because he found the "tar spring" and "stinking water." All others came after; even as those that came after Columbus discovered other parts of America, so those that came after Colter, other parts of the Park.

Colter and Columbus, figuratively speaking, are in the same boat.

Colter reached Lisa's camp all right, was promptly sent out again, this time on a visit to the Blackfeet, with whom he had another fight and only escaped with his life, his companion, Potts, being slain. In 1809 Colter returned to St. Louis in a canoe alone, three thousand miles in thirty days. Colter apparently having had enough of adventure, married and settled down in Missouri. He died in 1813.

The great fur companies had their traders and trappers all over the north-west, but strangely enough they never penetrated the wilds of the Yellowstone Park region, and after the decline of the fur trade about 1840 came the gold seekers, but they never touched the Park. Nature seems to have acted in self-preservation to keep this region for the later days of a better civilization, and the Indians were silent if indeed they knew aught to tell.

On a tree, near the Upper Falls, is an inscription:

J O R
Aug. 19, 1819

Here is evidence of the presence of a white man long after Colter had been there and half a century before any definite knowledge of the Park was published.

Who "J O R" was or whence he came no man knoweth. The ruins of ancient cabins, foot logs over streams, traps, etc., have been found here and there, but their owners have been silent as the Indians.

Joseph Meek is among those who first saw the geysers; he was in the fur business, and in 1829 his company had a brush with the Blackfeet. Meek lost his horse and became separated from his companions near the Park country. After four days wandering in the forests he climbed a hill to get his bearings, when lo! there beneath him were boiling springs from which the vapor rose from hundreds of vents, and immediately he bethought him of—Pittsburgh! Now what d'ye think of that! Pittsburgh!



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MAMMOTH FROM JUPITER TERRACE.

James Bridger, a Virginian, visited the Park regions as early as 1830. He also was a trapper and in plying his vocation came upon such scenes, the stories of which were so wonderful that they were known as "old Jim Bridger's lies." He described mountain streams that came down so fast that, although cold at the spring were boiling hot from friction at the base of the mountain, and that the water ran so fast in other streams that the rocks in the bed became hot (this is partially true; there are hot rocks in the bed of the

Yellowstone and other cold streams, but not from friction). Bridger told of the petrified trees, and was the originator of the catch-a-fish-in-one-pool-and-cook-it-in-another story, but Bridger improved on the present day story: he caught and cooked his in the same pool, the cooking of the fish being accomplished on his way out. Bridger told equally fairy stories of the petrified trees and the Obsidian Cliff.

Mr. Warren Angus Fergus, a clerk in the employ of the American Fur Company, was the first to write up the Yellowstone Park, which he visited in 1834. He approached the Park from the south and reached the geyser basins in May of that year in company with two Indians, guides.

In his writings in the shape of a diary, published at the time, he mentions one Alvarez, who "discovered" a beautiful fountain which lifted a jet of



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CLEOPATRA TERRACE.

water one hundred and fifty feet high, Alvarez claiming the height to be six hundred feet, and he says there were many other smaller fountains.

Fergus' descriptions, as printed in the *Western Literary Messenger* of Buffalo, New York, and in the *Mormon Wasp* of Nauvoo, Illinois, in 1842, are intensely interesting and with slightly more detail would do for the present day.

Father De Smet wrote similarly in 1852 of what he saw in 1851, confirming Colter's "Hell" and "Stinking Water." Father De Smet was the first to give out the exact parallels of latitude and longitude of the Park.

The first official Government exploration of the Park region was attempted by Capt. W. F. Reynolds, U. S. A., in 1859, for the double purpose of observing an eclipse of the sun due in that year and the verification of the wonderful stories that had been told. Dr. F. V. Hayden was the geologist of the expedition and Lieutenant Maynardier, second in command, with James Bridger as guide. Practically nothing was accomplished; the snows were so deep that they could not penetrate the passes, and after going completely around the Park, returned to camp with only the tales of James Bridger and Robert Meldrum to relate; he only saw from a distance what he had heard about. But the map of the country traveled by Captain Reynolds was of value and was published by the Department. A year later commenced the preliminaries of the War between the States, and every officer was called to duties other than explorations.

Capt. Walter W. De Lacy came to the Park in 1863. The Captain was in a terrible hurry, as many latter day people are; he passed within an hour's walk of Lower Basin, and although he crossed a stream of hot water he did not stop to examine it. He was after gold, and of course he was in a hurry, and this hurry deprived him of the honor of the discovery of the Fire Hole Lake and the Great Fountain Geyser. His report was not published until 1876; it said nothing of the great geysers. One portion of the De Lacy party, not in such a hurry, did find the geyser basins, but little more than the bare mention of the fact is found in the De Lacy report. James Stuart, with a large party, were in the east part of the Park and in the Absaroka Mountains after some Indians, but added nothing to the history of the Park.

These were followed in 1866 by the George Huston party, who visited the geysers, the lake and the river, and discovered Heart Lake. A reporter of the *Omaha Herald*, who published an account of their travels in his paper, made a very interesting story covering almost everything in the Park. Other parties went through the Park in 1867 and wrote wonderful stories for the newspapers.

As the years passed on and the tale of this wonderful region came to the people, every summer saw first one expedition and another start out; for the most part these pioneer explorers took the north side trails, but many went via the Madison River. In 1869, David E. Folsom, C. W. Cook and William Peterson went in by way of the Grand Cañon, thence to the Lake, on to Shoshone Lake, then north through the wilderness; they passed by the Upper Basin without seeing it, and came to the Fire Hole Lake, Lower Basin, and after a trip to the Excelsior Geyser, within five miles of Old Faithful, turned about and went home. Mr. Folsom published his story in the *Western Monthly* of Chicago in July, 1871, only one copy of which is in existence. In the collection of Mr. N. P. Langford, as the office of the *Western Monthly* was destroyed in the Chicago fire in October of that year.

One of the most important expeditions was that of 1870, when Gen. Henry D. Washburn, Hon. Nathaniel P. Langford, Hon. Cornelius Hedges, Hon. Truman Everts, Hon. Samuel F. Hauser, Walter Trumbull, Benj. Stickney, Jr., Warren Gillette and Jacob Smith, with an escort of one sergeant and four privates under Lieut. Gustavus C. Doane, U. S. A., with orders to go to the "falls and rivers of the Yellowstone," with no mention whatever of hot springs or geysers, as there seems to have been some doubt in the mind of the commandant, and of the explorers themselves, of the existence of any such phenomena.

This party entered the Park at the junction of the Gardiner and Yellowstone rivers. They were, at the moment of starting out, within five miles of one of the chief attractions of the Yellowstone Park, the great terraces of

Mammoth Hot Springs, and missed seeing them. The route was up the Yellowstone Valley to Tower Falls, where they encountered the first hot springs; thence over the east side of Mount Washburn. Ascending to the summit they saw in the vast panorama spread out before them, all and more than they had expected; they had had their first view of the Grand Cañon, and had seen the vapor from the geysers rising above the trees, but from their vantage point on the summit of this grand mountain, yet unnamed, but to be named for their leader, Washburn, they could see the Grand Cañon, the Yellowstone River and Lake that they came to see, and the geysers that they really had not expected to see, for the Mud Volcano and the Ink Stand were in active



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PULPIT TERRACE.

eruption in those days, and they could hear the roaring and hissing sounds that heretofore they had only heard about.

The following day they reached the cliffs of the Grand Cañon and had their first view of all its grandeur and beauty. Lieutenant Doane gave vent to his enthusiasm in a remark oft repeated in a slightly varying vernacular by the traveler of today when he has his first view of the Park: "I have my money's worth now."

The Washburn travelers spent some days in and about the Cañon, for some of them descended from the brink to the river; the height of the Falls

was measured. Thence they proceeded up the west side of the Yellowstone River, saw the Mud Volcano and Sulphur Mountain, and came to camp on the shores of Lake Yellowstone. It is impossible here to record their exclamations of surprise and wonder, because it is not intended to make this book one of exclamation points; the readers will supply these when they come.

The river was forded and the expedition continued up the east shore of the Lake, but not until Lieutenant Doane and Mr. Langford had climbed to the summit of the Absaroka Range, being in all probability the first white men to perform this very difficult feat; and very properly two of the loftiest peaks now bear their names. After the expedition had reached the Upper Yellowstone River, south of the Lake, Mr. Everts became lost in the almost impenetrable wilderness; for thirty-seven days he wandered, not aimlessly, but helplessly, about till he was found near the mountain that bears his name, opposite Mammoth Hot Springs, in an almost dying condition.

The story of this unfortunate incident is told by Mr. Everts himself, in *Scribner's* of that time, and Lieutenant Doane made it a part of his report.

After Mr. Everts became separated from his companions, the first day, his horse became frightened and ran away with all his arms and accoutrements, so that the rider was left without the means of defense or the wherewith to procure food. Being very near-sighted it was with the greatest difficulty that he could find his way anywhere, and when he started out he went just in the opposite direction from which he should have gone and wandered south as far as Heart Lake in the Snake River country. Remaining there several days, he slept near the geysers at night to keep warm, and during the day climbed the surrounding peaks in the endeavor to find his bearings.

In constant fear of attack by Indians or wild animals, his situation was pitifully discouraging; he was compelled to remain in a tree almost all of one night by a mountain lion. After this experience he gathered a supply of thistle-roots, his only food, boiled them in the hot waters, and started on his almost hopeless wanderings to find his way out. This time he set his face to the north and came to the southwest shore of Lake Yellowstone; following the Lake and the River he finally came to the camp that his party had left more than three weeks before. All through his tramp he had carried burning sticks in his hand, as he had up to this time never thought of starting fire from the heat of the sun's rays through the lenses of the field glasses which he still had with him. There was game all about him, but his pistols were lost with his horse, and his supply of thistle-roots was exhausted; he caught some small fish and two snow-birds to help out his precarious larder, but he was twice nearly a week without food, and once he was three days on the mountain-side where he could get no water.

His sufferings are unwritable; he was starving and well-nigh perishing from the cold.

He was found near Yancey's by Jack Baronett and George Pritchett, on the great plateau near the mouth of the Gardiner River and near to the mountain which bears his name, that mountain east of and seen from Mammoth Hot Springs. Baronett raised a mound of stones to mark the spot where Mr. Everts was found, then carried the exhausted and all but dead man in his arms to camp, and the next day took him to the camp at the junction of the Gardiner and Yellowstone rivers, where they first came into the Park.

Mr. Everts became lost on the 9th of September and was found on the 16th of October, after a period of extreme peril and untold suffering for thirty-seven days.

Mr. Washburn, Lieutenant Doane and the others scoured the forests for a week in search of the missing man; then believing him dead, or that he had taken

the back trail, took up their own perilous march in a homeward direction by what they thought would be the shortest route, thinking they had seen it all; it was home they were making for, little dreaming of the wonders in store for them.

They left the Yellowstone Lake behind them and were going west by north; they traveled nearly on the route of the present Circuit Road, but in an opposite direction from the way the stages go, crossed the Divide twice as the road does, and caught a glimpse of Shoshone Lake as we do from Shoshone Point on the road.

On the morning of the 18th of September, 1870, they came to the Fire Hole River, traveled down that stream, passed Kepler Cascade, and about noon emerged from the forest into the dreary waste of a treeless plain and, behold! there in front of them not a hundred yards away, a magnificent fountain was



STAGES ON THE ROAD.

throwing its crystalline waters up to the blue sky, it seemed to them, and vast clouds of snowy vapor rolled away in the sunlight of that September day.

It was Old Faithful!

Old Faithful in action!

In action every hour of that day, as Old Faithful has been in action every hour of every day and of every night since that day, and is in action every hour of today.

Now, these intrepid explorers, were they content, and would they hurry on their way? No. They staid at the Upper Basin all that day and the next, and saw seven of the greatest geysers of the world in eruption, and gave them the names which they bear to this day.

The night after this eventful day so fraught with interest to all the world,

these travelers of the wilderness sat them down around a campfire burning on the banks of the Madison River near the junction of the Fire Hole and the Gibbon, and as they talked of the perils passed, and of the wonders the



GOLDEN GATE.

world knew so little of, but soon would know, their words turned to what might be when this region should be in communication with civilization. These were business men, besides being explorers, and the business idea

prevailed with all save one, and that was to take up the lands around the points of interest and arrange for the shekels that would pour in when the sightseers should come.

Then up spake Cornelius Hedges, to say, No! this land must be "for the benefit and enjoyment of the people," and on that night, the night of the 19th of September, 1870, the Yellowstone Park was born.

Greatly to their credit the others all agreed with the "Park idea," and no more thought was expressed as to private enterprise, but they, every one of them, went home wedded to the promotion of a public park.

The first printed reference to the "Park idea" was written by Cornelius Hedges and appeared in the *Helena Record* of November 9, 1870, though Mr. D. E. Folsom claims a share of the honor in his letter to the *Western Monthly*, asserting that a part of his letter containing the Park idea was cut out by the publishers. Be that as it may, Mr. Hedges' was the first to appear in print on that subject.

General Washburn, Mr. Langford, Mr. Trumbull and other members of



OBSIDIAN CLIFF (VOLCANIC GLASS).

the expedition published articles in the newspapers and magazines of the time.

Lieutenant Doane's completed report of December 15, 1870, was forwarded through regular channels and finally reached Congress on the 24th of February, 1871.

Mr. Langford went on the platform and lectured in the larger cities, including Washington, where the Hon. James G. Blaine, then Speaker of the House, presided at the function and introduced Mr. Langford.

Engineer Capt. W. A. Jones was the first to attempt an entrance from the east side, and he was the first to cross the Absaroka Range. With Captain Jones was Prof. Theodore B. Comstock, a noted geologist. Their route carried them over the much talked of Two Ocean Pass, and their report verified its existence and that of Pacific and Atlantic Creeks.

Another engineer followed in 1875, Capt. William Ludlow, who had with him George Bird Grinnell, the noted editor of *Forest and Stream*.

From this expedition we have the first accurate measurements of the Falls of the Yellowstone. Also in 1875 came Secretary of War Belknap and party under the guidance of Lieutenant Doane.

Two years later, in 1877, Gen. W. T. Sherman and staff visited the Park, official report of which was made by staff officer, Col. O. M. Poe. But the most interesting chapter of 1877 was the pursuit of Chief Joseph and his band of Nez Percé warriors by Gen. O. O. Howard, and the capture by the Nez Percés at the Lower Basin of a party of tourists from Radersberg, Montana. In that year the Indians all over the northwest were, for



A BEAVER DAM.

the most part, on the warpath; it was only the year previous that the gallant Custer and his brave followers were cruelly massacred not very far away, and while there was no actual outbreak among them, near the Park there was a feeling of unrest.

General Sherman had just passed through the Park and had written to Secretary of War McCreary that there was no reason to apprehend danger from Indians. But Chief Joseph, White Bird, Looking Glass and Big Thunder took a different view of the situation; these and their followers were by

their own actions outside of a treaty made in 1863, and after a failure by a Commission sent in 1876 to pacify the Nez Percés, General Howard was sent to put them back on their Reservation.

In the early summer of 1877 several families of whites had been murdered by the Indians and three battles fought between them and the troops under General Howard and General Gibbon. The Indians were making for the buffalo country, while the order was for them to return to the Reservation; hence the conflict. General Gibbon had been all but defeated in a hard fought fight, the Nez Percés were in full flight eastward toward the Park and General Howard in hot pursuit.

General Howard came to Henry's Lake early in the morning of August 23d, where he was compelled to stop for rest and supplies; although the Nez Percés had just left, it was impossible under the condition of his men and horses to



NORRIS GEYSER BASIN.

continue the pursuit. Joseph camped that night just inside the Park boundary after having captured a white man by the name of Shively, whom they held as a guide, as the Nez Percés were unfamiliar with the country; he escaped, however, before they left the Park.

On the morning of the 24th of August the Nez Percés came to the Lower Basin and found a party of whites who had been visiting the geysers and were that morning breaking camp to go home to Radersberg, Montana; they were encamped just in the border of the forest west of the Basin, when the Indians came upon them as two of the whites were preparing breakfast. Mr. Cowan, the leader of the party, was still asleep in his tent when his wife called him and told of the arrival of the Indians.

Immediately there commenced a parley between Mr. Cowan and an Indian named Charley, who spoke English. Charley said that these were a band of friendly Flat Heads, but it was soon discovered that they were the Nez

Percés, known to be on the warpath. Then Charley informed Mr. Cowan that these Indians belonged to Chief Looking Glass' band and that Chief Joseph was "two sleeps in the rear;" that it was not safe for Cowan to remain where he was, or to go on home, as Joseph would surely murder him and his people, and that it was best for them all that they go with Looking Glass, which they were forced to do, but not without vigorous action on Mr. Cowan's part in the endeavor to protect his property from pillage by the redskins, and he was so energetic about it that it nearly cost him his life later in the day. The teams were hooked up and Mrs. Cowan and the others were in the wagons. Cowan was on horseback beside the wagon and the caravan started out; they had gone only a short distance when they encountered a large band of Indians lined up across the road.

All hope was gone; here was Joseph himself, painted red. The chief spoke not a word. Charley told Cowan that he and his people were to be taken right along with the Indians, and ordered the drivers to move on. Resistance was useless, even if the Cowans had been better armed, and surrounded by their captors they moved nearly two miles up the creek now called Nez Percé, where it was found impossible to take the wagons through the timber; the wheels were destroyed and the provisions taken by the Indians. The unhappy prisoners, mounted on their own horses, were marched through the wilderness till they came to the foot of Mary Mountain, where they arrived about noon. A council was held by the chiefs, Poker Joe interpreting for them and Mr. Cowan. Poker Joe said that he had known Mrs. Cowan and her sister in the Helena country, and gave Mr. Cowan the cheerful information that the Indians had lost many warriors, women and children in the battle of the Big Hole, and that his companions were anxious to be avenged, but that it was not the intention to kill these women or any of the men if they would give up their arms and horses, for which the Cowans were to take the broken down animals of the Indians and go on home.

Cowan could do nothing but accept. The Indians took Cowan's horses, arms and supplies and started on eastward, while the Cowans took the trail back; they had hardly gone a mile when Charley, at the head of nearly half a hundred Nez Percés, came on the run yelling the unearthly warwhoop. Charley demanded to know where the two men were who took to the woods when the party was captured. Cowan couldn't or wouldn't tell him; then they were all taken prisoners again and marched a mile beyond where the first council was held.

Two Indians were sent forward to see if the chiefs were a safe distance ahead. In a little while they came dashing back; one of them fired at Cowan, striking him in the thigh; as he dropped from his horse, Mrs. Cowan dismounted and rushed to her husband's side. Carpenter, Mrs. Cowan's brother, knowing the Nez Percés to be both religious and superstitious, made the sign of the cross and saved his life from an Indian rifle that was already aimed at him, the Indian telling him he would not kill him. Cowan rolled down the hill; his wife followed and did her best to protect him, hiding his head in her arms. Charley saw that Cowan's wound would not kill him, dragged Mrs. Cowan away while another Indian gave him a second shot; some stones were thrown onto his body and he was left for dead. Mrs. Cowan, her sister and brother were made captive and taken on the march with the Indians. After some two or three hours, just before sunset, Cowan regained consciousness, raised himself up, only to get another shot, this time in the back; strangely enough this Indian went away without scalping him.

Cowan at once set about making his escape, if that could be possible with his three terrible wounds and a paralyzed leg, but he managed to crawl back

on the trail until about midnight following this awful day, when he encountered a sleeping Indian, who had heard him approaching, raised up, looked around and resumed his nap. Cowan passed around him through the woods and avoided another shot; then he passed some horses abandoned by the Nez Percés, but they could be of no use to him as he was unable to mount. He had no food and it was not till noon the next day that he found water.

Cowan again heard approaching Indians, hid himself till they passed by; it was a large party led by a white man, a band of friendly Bannocks with



THE ROAD NEAR NORRIS.

an army officer in command, but Cowan didn't know it and he was taking no chances. When he came to his wrecked wagons his faithful dog was still there, but there was no food for either man or beast. Finally Cowan dragged his weary and wounded body to the camp he had left the day before, found some matches and some coffee scattered on the ground, and with an old tin can made some coffee, the first morsel that he had had since he was shot.

He remained at the camp that day and night, then started his crawl again

toward the Nez Percé Creek, where he met two of General Howard's scouts who told him they had come to bury him, as his two men had escaped the Indians and reported him dead. The scouts gave him food, built a fire for him which came near burning him up in his sleep that night, and left him there till General Howard's troops should come along, which they did on August 30th, six days after Cowan had been captured. His wounds were cared for and he was told that his people were safe; he was taken in one of the army wagons as far as the Mud Geyser, then sent on toward home to Bottler's Ranch, twenty-five miles north, and thence to Bozeman, where Mrs. Cowan joined him. Mrs. Cowan and her sister and brother received no ill treatment from the Indians, were released at the Yellowstone River and made their way to Bottler's Ranch also, but left again for home before Cowan came, and without knowing even that he was alive.

The names of the
Radersburg tourists
were Mr. and
Mrs. Geo. F.
Cowan,



WINEGLASS BOULDER,
GIBBON RIVER.

Frank and Ida Carpenter, brother and sister of Mrs. Cowan, Charles Mann, Wm. Dinger, Albert Oldham, A. J. Arnold and Mr. Meyers.

Another party of tourists from Helena were less fortunate; they lost two men killed, one wounded and one old negro cook all but scared to death. This party was encamped on the Yellowstone River, right in the path of the Nez Percé raid. When the Indians came upon them, one man was killed and the others fled in the direction of Mammoth Hot Springs, where the savages followed them and killed another man; the men killed were, Kenck, shot early in the retreat, the other was Deitrich, who was shot down in the door of McCartney's cabin in the gulch just west of Liberty Cap.

The old negro cook, Stone, sought safety in Lieutenant Doane's camp, after a bear had chased him from the gulch where he had spent the most of the night up a tree. He prayed to the Lord that the Indians might not find him and they didn't, and afterwards the Lieutenant had to put a guard over him to, in a manner, squelch his loud sounding praises to God for his deliverance, so the soldiers could sleep; but old Ben Stone had escaped the Nez Percés and didn't care who knew it.

Thus endeth the first and only Indian story of the Yellowstone Park. A tablet near the Nez Percé Creek is placed there in remembrance of the Cowan incident and to mark General Howard's camp, which he called Camp Cowan.

Col. Hiram Chittenden, the noted engineer and author, takes the stand that the Nez Percés were in the right in principle, even though they had failed to sign a treaty with the United States and had left the Reservation assigned them. Chittenden is a soldier and man of discretion and experience, and his observations are to be given deepest consideration. He says: "If there ever was a case where sympathy might well incline to the side of the Indian, it is the one under consideration, viz., the Nez Percés." He says further:

"The Nez Percés had always been friendly to the whites, and it was their boast that they had never slain a white man. They were intelligent, brave, and humane. In this campaign they bought supplies which they might have confiscated; they saved property which they might have destroyed; they spared hundreds of lives which other Indians would have sacrificed. If some of the more lawless element committed various outrages, they might justly reply that the whites had fired into their tents where their women and children were sleeping. In short, their conduct in this campaign places them in all respects nearer the standard of civilized people than any other of the native tribes of the continent

"In estimating the causes that led to the war, history cannot fail to establish that the Indians were in the right. It was a last desperate stand against the inevitable destiny which was robbing the Indian of his empire; a final protest against the intolerable encroachments of the pale face. In defense of this principle, the Nez Percés staked their all on a single throw. They lost, and were irretrievably ruined. They were transported to a distant territory, and the land of their fathers they saw no more."

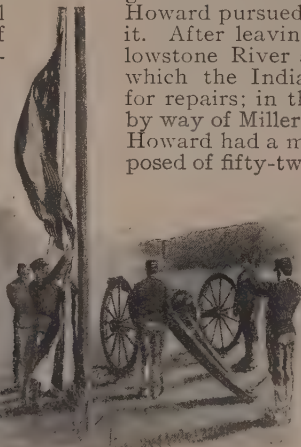
Of course, Colonel Chittenden does not pretend to excuse the marauding and massacres by the unruly element of the Nez Percés, as in the Cowan incident, but he does give them credit for their defense of inherent rights.

General and out of to the Yellowstone bridge, some delay the Park General

Howard pursued the fleeing Nez Percés into the Park it. After leaving Camp Cowan, he followed the trail lowstone River and down that stream to Baronett's which the Indians had partially destroyed, causing for repairs; in the meantime the Nez Percés had left by way of Miller Creek.

Howard had a most extraordinary engineer corps composed of fifty-two mountaineers picked up in Idaho,

organized and placed under command of Capt. W. F. Spurgin; each man owned his horse and equipment. As they were not really engineers they were classed as "skilled laborers," and as such, paid three dollars per day. It did not take many days for the soldiers to condense the "skilled laborers" to "the Skill-ets." They did remarkable work but they could not make roads as fast as General Howard wanted to move, yet "the Skill-ets" did cut their way through the forests over Mary Mountain,



THE SUNSET GUN—FORT YELLOWSTONE.

from the Lower Basin to the heights of the shores of the Yellowstone River where Spurgin let his wagons down with ropes to the river bank; this was called "Spurgin's Beaver Slide." Then he was up with Howard's army, crossed the Yellowstone twice, furnished his General with a pack train of ample capacity, and from Cascade Creek took his wagons to Fort Ellis without losing a wheel. A tablet near the Upper Falls marks the spot of "Spurgin's Beaver Slide."

Now the Nez Percés had Howard and Gibbon in their rear, with General Miles and General Sturgis in front, and turned their direction northward with



BERYL SPRING.

the hope of crossing the line into British America, but were intercepted in the Paw Paw Mountains by General Miles, and after a severe battle, October 5, 1877, in which Looking Glass was killed, almost the entire band surrendered, some few escaping to Canada. Joseph and some of his chiefs were taken to Fort Leavenworth, afterwards to the Indian Territory, and finally to a Reservation in the State of Washington.

With the exception of a horse-thieving raid by the Bannocks in 1878, this was the last of Indian depredations in the Park.

In 1877, as the successor of Mr. Langford as Superintendent of the Park, came Mr. Philetus W. Norris of Michigan, and whatever else he may have done for the Park in his five years of incumbency, he succeeded in naming more places, basins, geysers, peaks, etc., than any other man that was ever in the Park before or since. When he could think of no other name for anything he would just call it Norris and let it go at that, but while he was naming things he did not forget his friends or their families; he had them all remembered by something in the Park as long as the peaks, creeks, geysers, etc., held out. But he was enthusiastic and energetic and did much good work in laying out and building roads, writing, and in a general way promoting the interests of the Park.

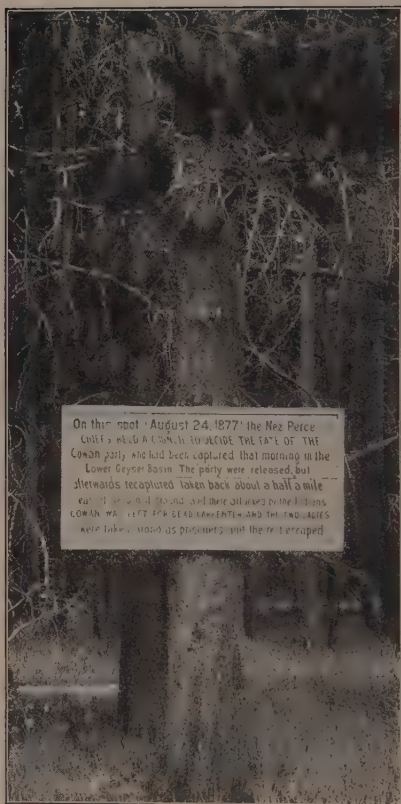
Mr. Norris was succeeded in 1882 by P. H. Conger of Iowa, who provided a very unsatisfactory administration in every way, as for instance the formation of the Yellowstone Park Improvement Company and the leases of large tracts of land, covering the most attractive features of the Park, all of which came up under the Conger régime. He resigned in 1884.

From 1877 many distinguished men visited the Park. In 1880 came the Hon. Carl Schurz, Secretary of the Interior, accompanied by General Crook, under a formidable escort of officers and soldiers; in 1881, Gov. John W. Hoyt of Wyoming and escort under Maj. Julius W. Mason.

Gen. Phil Sheridan was in the Park twice during the seasons of 1881 and 1882.

But in 1883 the influx of distinguished travelers reached a climax. In that year came the President of the United States, the Secretary of War, the Lieutenant-General of the Army, Chief Justice and Associate Justices of the Supreme Court, United States Senators, Foreign Ministers from Germany and England, Members of Parliament, President of the Admiralty, together with a large number of prominent officers of the United States Army and distinguished civilians, not to omit the famous photographer, F. Jay Haynes, who accompanied the presidential party, and whose photographs were an important feature in the subsequent reports.

President Arthur's caravan was an imposing one; everybody was on horseback and the escort was a full troop of cavalry. The pack-train was the most complete that ever took the road anywhere. The route covered nearly four



On this spot August 24, 1877 the Nez Perce chief, who had been captured that morning in the Lower Geyser Basin. The party were released, but afterwards recaptured taken back about a half a mile east of here and there attacked by the Indians. COWAN was left for dead and the Indians were taken as prisoners and there recaptured.

COWAN TREE.

hundred miles; couriers were stationed at intervals of twenty miles, with relays, that the President might remain in quick communication with all parts of the country, even though he was in the wilderness and three thousand miles from the capital.

It was altogether the most imposing and important expedition that had ever visited the Yellowstone Park.

During 1884, Mr. Robert E. Carpenter of Iowa, as Park Superintendent, set out to promote the schemes that had their origin under the Conger administration, and spent the most of his time in and about the halls of Congress in the interest of the Yellowstone Park Improvement Company, who were to do so much for its members under the guise of public utility. The failure of the Improvement Company's measures in Congress and Mr. Carpenter's interest



FOUNTAIN HOTEL.

therein led to his prompt removal, and he was succeeded in 1885 by Col. David W. Wear of Missouri, who remained in the Park only about a year and was the last of the civilian superintendents.

Commencing August 20, 1886, the Yellowstone Park was placed under the direct supervision of a military officer, although the Interior Department at Washington is in control, and on that date Capt. Moses Harris, First U. S. Cavalry, was made Superintendent with a garrison of sufficient size to enforce the laws, rules and regulations, and the military régime has proven itself satisfactory to all concerned and to the people.

The Yellowstone Park Improvement Company had commenced building the Mammoth Hot Springs Hotel in 1884, failed in 1885, before the hotel was

completed, and was bought out by the Yellowstone Park Association, which at that time was backed by the Northern Pacific Railway, and the Mammoth Hotel was finished to completion, followed in rapid succession by the hotels at Norris, Lower Basin, Upper Basin, Lake and Cañon, as described in another part of this book.

Now the Yellowstone Park was really open for business and the Northern Pacific Railway commenced selling through tickets to Cinnabar.

In 1887, Lieut. Frederick Swatka of Arctic celebrity came to the Yellowstone Park with the intention of making a tour of the Park in winter. Swatka had made a name for himself in the Far North, and brought with him his tested and tried paraphernalia for travel over the snow, but he did not succeed in getting through the Park as he was taken ill after three



COMING HOME.

days' tramp to Norris and was compelled to give up; but Mr. F. Jay Haynes and others of the expedition continued their perilous journey, and with Ed. Wilson, a Government scout, visited the Upper and Lower Basins, the Grand Cañon, the Falls, and after passing over Mount Washburn, returned via Yancey's to Mammoth.

They started out with toboggans, skis, snowshoes, sleeping bags, etc. The toboggans were abandoned at Norris and the men took their supplies, cameras and sleeping bags on their backs and trudged along till they had covered nearly two hundred miles of a snow-hidden wilderness.

By this time transportation facilities in the Park had greatly improved. Wakefield had established a line of Concord coaches in 1884, which was taken over by the Yellowstone Park Transportation Company in 1891, at that time under the management of that noted pioneer in the stage business in Montana,

Mr. Silas S. Huntley, the genial, courteous "Si" Huntley, who laid the foundation of the finest and best equipped stage lines in the world. Si Huntley lived a life of genial good fellowship, of business integrity until the day of his death in 1901, loved and respected by all who knew him, lamented by all as the great and good friend of the Park.

Mr. E. C. Waters had made steam navigation on Yellowstone Lake possible by launching in its waters the steamer Zillah, and in 1891 the first party of tourists under escort of Raymond & Whitcomb had been taken over the Circuit Road. Wylie had in 1890 established his "permanent camps," and the Park was indeed on the road to prosperity, but it was not till 1894 that



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CRATER, GREAT FOUNTAIN GEYSER.

the necessary laws were enacted for the complete protection by the passage of a bill introduced in Congress by Senator Vest of Missouri, which bill did and does protect the Park, the animals that live therein, and from all encroachments by man from without, in his desire to introduce railroads and trolleys, but the matter is at rest; the Yellowstone Park will remain as the scene of the finest coaching trip in the world and the home of all the animals, that they may occupy all their days, till they die of old age, if they behave themselves.

An incident of the year 1894 is worth relating. It was the second winter expedition of the Park regions; it was the first winter trip for all except Jay Haynes, who had made the winter trip in 1887, and why he should want to go again, I can't imagine. Ask Mr. Haynes; he is alive, well and hearty, and long may he be; perhaps he can tell you why he made the second winter trip around the Yellowstone Park. The personnel of the second winter trip of the Park was Captain Scott, Lieutenant Forsyth, Burgess the scout, Sergeant Troike, Burns, F. Jay Haynes and two non-commissioned officers. They traveled on snowshoes, each carrying his own equipment; Haynes with his camera that has done so much to promote the interests of the Park.

The quest of the expedition was to look after the buffalo then in Hayden Valley, and Ed Howell, a notorious poacher, who was reported as committing depredations there.

The party went to Norris, east to Hayden Valley, and thence to the Lake, where they found the camp of the poacher, Ed Howell, his fire still burning; they concluded that he was not far away, and started out to find him. Six buffalo heads were found suspended from trees at the camp. After tramping through the snow some hours, firing was heard and in an hour the poacher was sighted. Burgess and Troike arrested him, but not until Howell had killed six more buffalo, making a total of twelve that had fallen by his murderous, merciless hand. Howell was taken to the Lake Hotel, thence to the guard-house at Fort Yellowstone, where he was properly punished. Thus were the buffalo being rapidly exterminated till there are now less than a hundred of the Park herd, the remnant being quartered in the Lamar Valley where they have every care and attention, so that the noble animal may not wholly disappear from the face of the earth.

Within the next few years from 1895 the improvements in the Park and travel thereto steadily progressed; the Pullman Company established the through sleeping-car line from St. Paul to the Park on June the second of that year. In 1896, "Uncle Tom" rigged up his rope ferry over the Yellowstone River above the Upper Falls and his ladders to the river bed below the Great Falls. The bridge over the Yellowstone below the outlet was opened for traffic via the Cody Road in 1898, and in 1899 the Monida Line via Dveller's and the West Gate was opened, and in that year the Fountain Geyser changed its base of operations from the pool where it had played before to the adjoining one. The writer hereof had the good fortune to be standing by when the change was made.

In 1900 tents were put up at the Upper Basin for the accommodation of tourists who, until that year, had to return to the Fountain Hotel for lodging; these tents were the predecessor of Old Faithful Inn, that most unique hostelry that is now on duty.

Silas S. Huntley, who had been in active management of the Yellowstone Park Transportation Company, died suddenly in September of 1901, lamented by all whose good fortune it was to know him.

President Roosevelt came to the Yellowstone Park in April of 1903, not a most propitious time for a tour of the Park for less strenuous people, but the President would really prefer horseback and sleigh riding to a stage any day, so April was just as good as July for him. Mr. Roosevelt was accompanied by the noted naturalist, Mr. John Burroughs. They arrived on the 8th of April and left on the 24th, on which date the President assisted at the laying of the cornerstone of the decorative arch at the North Gate, Gardiner. The President's address was supplemental to the Masonic ceremonies. There were over 3,000 people present.

Mr. Roosevelt was the second President of the United States to visit the



TREED.

attractive scenery in the Park, hitherto inaccessible to all except the more venturesome travelers.

Stairways, railings and platforms were built on the brink and sides of the Grand Cañon and at the Upper and Lower Falls, and down to the water's edge below the Lower Falls, the latter since removed; nobody knows why, as they were in favor with everybody, and it is hoped they may be replaced.

Mr. E. C. Waters placed his new steamer, named for himself, in com-

Park, President Arthur having preceded him twenty years. As a coincidence, both Presidents entered the Park on horseback, hence there is a first place for a President to make the tour by stage. Mr. Roosevelt went to Yancey's on horseback and remained in camp there for a week. Afterwards he went by sleigh to the Lower Geyser Basin and to the Grand Cañon of the Yellowstone.

In this year the Northern Pacific Railway completed their very beautiful station at Gardiner, built in the Old Faithful style of architecture, abandoned the terminal of the Livingston-Park Branch at Cinnabar and moved up to Gardiner, depositing their passengers right at the boundary of the Park.

The bridge over the Yellowstone River above the rapids, at the Upper Falls, and the road to Artist's Point, enabled tourists to visit the south side of the Grand Cañon; bridge and road were completed in 1904.

This was a great year from a hotel point of view; Old Faithful Inn opened its doors, and the extension of the Lake Hotel, with the addition of its three splendid porticos, rendering it worthy of a better name, the Colonial, was completed in the following season.

The road to Mount Washburn and through Dunraven Pass to Tower Falls opened up an easy and comfortable way to visit some of the most

mission on Lake Yellowstone, a year later lost his concession, and the boat privilege on the Lake was assigned to T. E. Hofer Boat Company, who have a fleet of gasoline boats and launches in service between Thumb Bay and the Lake Hotel, and numerous row and motor boats for fishing and pleasure purposes.

The most important event of 1907 and 1908 was the completion of the Oregon Short Line to Yellowstone Station at the West Gate with stage connection via the M-Y Line, and the complete abandonment of the route via Dwelle's to Monida.

Thus, this historical chapter, commencing a hundred years ago, is brought down to contemporaneous events, dealing with important facts, in the abstract. To do the subject justice it would take a larger book than this to



A WYLIE CAMP.

tell all the interesting details, but that is impossible in this one, and the task is left for another time.

INDIANS OF THE PARK.

The Yellowstone Park region was a *terra incognita* to the Indian tribes living in the country round about, save one tribe, a puny people preying on nothing greater than the mountain sheep, their chief article of diet, hence they were called the Sheepeaters. A peaceful tribe of small stature, unarmed except as to bows and arrows, and these used only for procuring food, as they chased the sheep into corrals and close places where they were easily dispatched to the end that they might secure their board and clothes, as the sheep skin was at once a business suit and evening clothes for the men, shirt-waists and skirt for the ladies.

The earlier explorers of the Park found trails, evidently Indian, running north and south, east and west, but on routes, studiously avoiding any locality suggesting a geyser.

The Blackfeet, the warrior tribe of the northwest, and, as of other brands of Indians, there were no good Blackfeet except the dead ones. They were on the warpath from December to June and from June to December, against the white man in particular, and against the other Indian tribes on general principles; the Crows, the Bannocks, the Shoshones, et al., were enemies all, just because. The Blackfeet lived near the headwaters of the Missouri.

The Crows were more friendly to the whites but could not always be counted upon, because they were Indians, you know; they lived in the Big Horn and Yellowstone valley. They were great lovers of the horse, no matter to whom the horse properly belonged; he was such a favorite that the average Crow could not resist the temptation to take him along, which he invariably did if the owner was asleep or otherwise not looking.

The Shoshones dwelt in regions south of the Park and east and west of it. They were of an inferior stock and so feared the white man that he was comparatively safe while in their midst, provided none of their braver neighbors were not visiting. The Sheep eaters, or Tukuarikas, were a branch of the Shoshone family.

The Bannocks were of a higher class than their neighbors, were good hunters and fair fighters; that is, as fair as any Indian can be.

In latter days the Nez Percés were near the Park but they did not enter it for pleasure or profit as white folks do; they, the Nez Percés, only crossed it on a retreat and then had to force a white man to guide the way.

That all these tribes crossed the present borders of the Park is evidenced by their trails, but these trails were little used, and probably never used except in cases of necessity. The trails are in proximity and general direction of the roads and trails of the present day.

The Indians knew little of the Park and said less; it was to them a region of burning mountains to be let severely alone, and the few that probably did see the geysers and boiling lakes told the others about it and they were willing to take their word for it and didn't take any chances that, to them, seemed to be so devoid of the presence of the Great Spirit.



Geographical

Perhaps the first writing down of the exact location of the Yellowstone Park was in a letter by the distinguished missionary, Father De Smet, in 1852, wherein he says: "I think that the most extraordinary spot, and perhaps the most marvelous, is in the very heart of the Rocky Mountains, between the 43d and 45th degrees of latitude and the 109th and 111th of longitude," which is almost perfectly correct.

The Act of Dedication puts the location in plainer terms for the general reader; the Act says in effect: "Commencing at the junction of the Yellowstone and Gardiner rivers, the north boundary runs east to the meridian ten miles east of the most eastern shore of Yellowstone Lake; thence south to the parallel of latitude, ten miles south of the most southerly shore of the Yellowstone Lake; thence west to the meridian fifteen miles west of the most western point on Shoshone Lake; then northward along the meridian to the parallel of latitude of the junction of the Yellowstone and Gardiner, and eastward along that parallel to the commencing point." These were the original dimensions of the Park; in miles they were 61.8 miles north and south by 53.6 east and west. But the area of the Park has been largely increased through subsequent Acts of Congress in 1891, 1897, 1902 and 1903, by the addition of Forest Reserves on the east, west and south sides till the area has increased from 3,312.5 square miles to 17,600 as it now exists.

The great body of the Yellowstone Park lies within the boundaries of the State of Wyoming, with a strip of the northern and western border extending over into the States of Montana and Idaho.

MOUNTAINS—The Absaroka Range extends along the eastern border of the Park from north to south. A magnificent view of this range is from the boats crossing the Lake. The average altitude of its peaks is from 10,000 to 12,000 feet; the most prominent are Cache, Saddle, Pyramid, Cathedral, Chittenden, Silver Tip, Giant Castle, Avalanche, Grizzly, Signal Hill, Doane, Langford, Stevenson, Atkins, Schurz, Humphreys, Colter, Table, Turret and Trident mountains or peaks.

The Giant's Head is plainly outlined against the sky in the view from the boats and from the stage between the Lake and the Cañon. There is snow near the summits nearly all summer. The white areas on the slopes and nearer the base, as seen from the Lake, are not snow, but "Formations."

The Gallatin Range is in the northwest corner of the Park, separating the watersheds of the Missouri and Yellowstone rivers. The chief of this range is Electric Peak, the highest mountain in the Park (11,255 feet); the other peaks are Joseph, Quadrant, Gray's, Bannock, Huntley, Holmes and other lesser mountains.

The Washburn Range separates the Gardiner and Yellowstone rivers; this range is also called "Elephant's Back." The chief is Mount Washburn, of course; the others are Dunraven, Hedges, Folsom, Prospect, Storm and Observation, with an average altitude of nearly 10,000 feet.

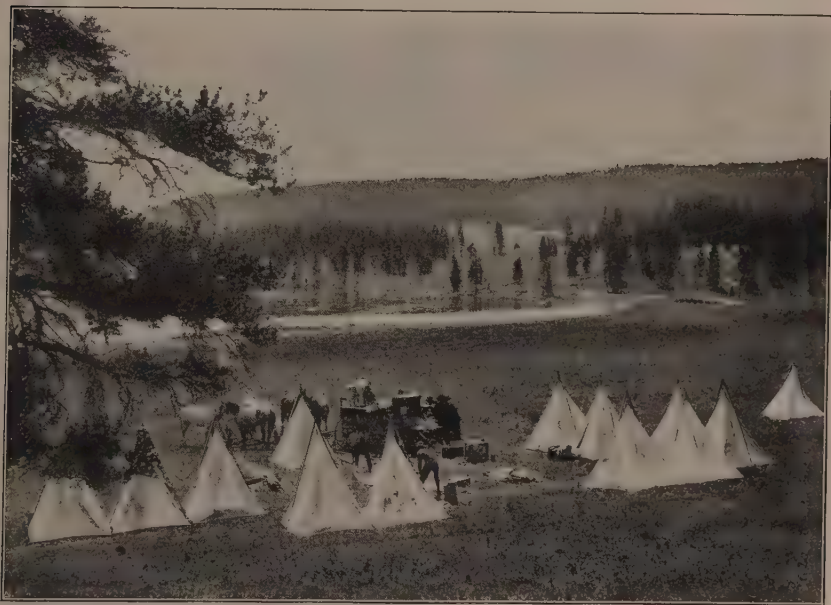
The Red Mountain Range has for its chief one of the most picturesque peaks in the Park, Mount Sheridan. The others are Factory Hill, probably

so called on account of there being no factories anywhere near, and some minor mountains.

Big Game Range is south of the Red Mountain; Hancock and Grave are the principal peaks.

The Teton Range is not in the Park, but just south of the southern border, rising almost from the very waters of Jackson Lake. There are three or four peaks called the Tetons; the highest, the Grand Teton, is 13,750 feet high, the loftiest peak north of Colorado.

In the southwest region of the Park are minor ranges and peaks, among which are Sunset, Wild Cat, Huckleberry, Bobcat, Forellen and Mount Moriah.



CAMPERS.

The Indians had great excuse for their legend, calling this the "Top of the World."

THE PLATEAUS—The Madison is on the west side, altitude 8,400 feet, and south of it is Pitchstone, 8,600 feet, with Thoroughfare Plateau, 8,000 feet, in the southeast corner. Two Ocean Plateau is just south of the Yellowstone Lake; Mirror Plateau is in the northeast region of the Park, and Solfatara Plateau is just west of the Great Falls of the Yellowstone. Highland Plateau is in the northeast corner, 8,350 feet.

THE GREAT CONTINENTAL DIVIDE crosses the Park from about midway of the west border, running to the southeast corner. The Circuit Drive crosses the Divide twice between the Upper Basin and the Lake. Waters flowing

from the west slope find their way to the Pacific, those on the east to the Gulf of Mexico.

VALLEYS AND CAÑONS—Perhaps the prettiest in the Park is the Hayden Valley, between the Lake and the Falls of the Yellowstone; Lamar Valley, in the northeast portion, is also a very fine one. Paradise Valley is not in the Park, but those who enter by the North Gate pass through it and cannot fail to see its beauties. Swan Lake Valley, Gibbon Meadows, Pelican Valley and a hundred more add to Park attractiveness. Jackson's Hole is south of the southern boundary. The Grand Cañon of the Yellowstone surpasses



PAINT POTS, LOWER BASIN.

all others in the world for the great natural beauty of the brilliant coloring of its walls. There may be a few others longer and deeper, but here is the most beautiful cañon of all the earth. It is simply indescribable, and artist's pencil nor camera can give the faintest idea of the grandeur of its beauty.

The Grand Cañon of the Yellowstone begins just south of the Upper Falls and continues northward for more than twenty-five miles; it is from 1,000 to 1,800 feet deep and varies from a few hundred feet to more than a mile in width. There are really four cañons of the Yellowstone River, two in the Park and two beyond its borders.

There are two cañons of the Gardiner River, the one passed through between the North Gate and Mammoth Hot Springs; the other is south of Bunsen Peak, the object of a fine drive from Mammoth.

The Gibbon River has two cañons, one at Virginia Cascade, between the Cañon Hotel and Norris, the other between Norris and the Fountain.

The Fire Hole River cañons are, one five miles west of the Fountain Hotel



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BISCUIT BASIN.

where the West Gate road joins the Circuit Drive, the other just east of the Upper Basin, seen best at Kepler Cascade.

The road east from the Upper Basin passes through Spring Creek Cañon, a drive of much beauty.

The Cody Road through Sylvan Pass runs through cañons of great depth

and ruggedness, particularly that of Middle Creek; the only practicable pass through the Absaroka Range.

LAKES—The Yellowstone Lake is the chief of the Park, altitude 7,745; it has a shore line of nearly 100 miles and covers an area of about 140 square miles; the depth is from 10 to 300 feet, though it is said that there are holes that are deeper. The water supply comes from snows of the surrounding mountains and from the Yellowstone and other rivers and creeks. The other important lakes are Shoshone, Heart, Lewis and Two Ocean, all in



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RIVERSIDE GEYSER.

the south part of the Park, with Jackson Lake just over the border to the south and Henry's Lake on the west. There are myriads of lakelets and ponds everywhere of surpassing beauty and wonder, as the Fire Hole Lake near the Fountain.

RIVERS—It is a popular fallacy that the Yellowstone River has the Yellowstone Lake for its source; as a matter of fact, the Yellowstone River rises about twenty-five miles southeast of the southern border, in the foothills of Yount's Peak, flows north into the Lake, through it and out again at "the outlet" on the north side. Scientists say that in the thousands of centuries ago the waters of the Lake and River were nearly 200 feet higher than they

are now, and that the River, dammed up by glacial ice in the north, flowed south into Outlet Creek and Heart Lake and found its way to the Pacific.

From the Lake to the Cañon the road runs for the most part just on the shore of the river, and always in sight of it.

The Yellowstone River is one of the prettiest in the world; a wide, swiftly flowing river at the outlet, grows narrower and more rapid all the time, dashing over rapids and cascades, now widening out in the Hayden Valley, then rushing through the enclosing hills till it leaps over the Upper Falls, then hurries, hurries for the final plunge over the Lower Falls deep down



THE GROTTO.

into the grand old Cañon, where it is narrower still and still more in a hurry till it leaves the Park northward, then eastward for nearly four hundred miles and loses itself in the Missouri. The River is in the view almost all the way from Gardiner to Glendive on the Northern Pacific Railway.

The Madison River, formed by the junction of the Fire Hole and Gibbon rivers, flows westward and passes over the boundary line near Yellowstone, the West Gate; travelers entering or departing there pass along its shores for many miles.

The Fire Hole River rises in Madison Lake, flows northward through the Upper and Lower Basins and joins the Gibbon just west of the latter; it is a fretting, foaming river with very little of the still waters that run deep.

Among its many beauties are Kepler's Cascade, just above Old Faithful, and the falls and rapids at the junction of the west road with the Circuit Drive.

Gibbon River has its source in Grebe Lake just northwest of the Cañon, flows west and south to the junction with the Fire Hole. The Circuit Drive crosses the Gibbon many times between the Cañon, Norris and the Fire Hole; its very pretty bits are Virginia Cascade and Gibbon Falls, both seen from the drive.

Nez Percé Creek rises at the base of Mary Mountain, runs west to its mouth in the Fire Hole River at the north side of the Lower Basin; the Circuit Drive crosses by both bridge and ford.

The Gardiner River has its source from the snows and springs of the great peaks in the northwest corner of the Park, west of Mammoth, runs around Bunsen Peak to the east of Mammoth and empties into the Yellowstone River at Gardiner. Its tributaries are Indian, Panther and Obsidian creeks. The road from the North Gate to Mammoth along the Gardiner is a very pretty one, but discloses no hint of its other beauties around behind Bunsen's Peak in the deep cañons that are there.

Tower Creek gets its waters from the snows of the Washburn Range, flows northeast to its junction with the Yellowstone River after making the leap over Tower Falls; its beauties are to be seen from the road from the Cañon to Mammoth via Mount Washburn and Yancey's.

Snake River rises in the extreme southern portion of the Park, flows north, then south, passing into Jackson Lake on its north shore and out again on the southeast shore, and over the southern border of the Park.

Pacific Creek and Atlantic Creek have their sources in Two Ocean Pass, near the southeast corner of the Park, where a mountain stream divides itself, sending part of its waters down the Pacific Slope and the other towards the Atlantic. This is not the dividing of the waters as seen on the Drive.

Alum Creek, strongly impregnated with alum, empties into the Yellowstone River just south of the Cañon, and Trout Creek just south of Alum.

Spring Creek and its cañon is between the Upper Basin and the Lake on the Circuit Drive.

There are hundreds and hundreds of other creeks and brooks too numerous to name in this chapter. Look at the map.



Geological

Chittenden in his writing, in his most masterly and interesting work, "The Yellowstone," devotes pages to the geological formation of that region, and it were more than worth the while of the student to have the book and study it, rather than skim over the superficial paragraphs that might be written here; and every traveler of the Yellowstone Park owes a debt of gratitude, not geologically alone, but for everything that is there written about, to one man more than to all others. I mean to Hiram Martin Chittenden, Lt.-Col., Corps of Engineers of the United States Army, who made the roads of the Park and then made a book that tells its story better than any other.

In his geological chapter, page 199, Chittenden says:

"It is an interesting but never-ending study, that of the rocks of the Yellowstone Park, and impossible of extended treatment here; but that the reader may have some assistance in his attempt to identify them, if he visits the Park, the following references are given to the more important outcroppings along the main route:

"Upon entering the Park from the north the tourist alights in a bed of glacial drift and sees strewn all around him granite and other boulders, brought down from the Gallatin and North Absaroka ranges.

"The rock from which the entrance gate is built is from a basalt outcrop, just across the Yellowstone from Gardiner. Nearly every piece is a section of an hexagonal prism.

"The valley of the Gardiner along which the road lies is on the line of a fault where the earth's crust parted, that on the right dropping down and that on the left lifting up, and forming the feature now known as Mount Everts. It is mainly composed of sedimentary rocks, limestones and sandstones. Along the eastern portion is a covering of rhyolite distinctly prominent in that bold escarpment of which a salient angle fronts Bunsen Peak and the valley of the Middle Gardiner.

"Soon after the road leaves the river and begins the ascent of the hill it strikes the travertine deposits of Mammoth Hot Springs. The road is cut through this formation in several places.

"In ascending the hill above Mammoth Hot Springs the road lies in the travertine most of the way for three miles, and in one place passes through a remarkably confused mass of broken formation locally called the 'Hoodoos.'

"The Golden Gate Cañon is through rhyolite rocks.

"The rocky formation of Bunsen Peak is of dacite porphyry surrounded by rhyolite and basalt. A beautiful display of the latter rock may be seen in the walls of the Gardiner Cañon behind the mountain.

"Swan Lake Flat is covered, as the visitor will readily observe, with glacial drift.

"Near the seventh mile post, where the road crosses the Gardiner River, about a thousand feet up stream, may be seen a fine outcropping of basalt broken up into angular boulders. Quantities of this rock have been crushed for use on the roads.

"The Gallatin Range, in full view, has many exposures of sedimentary rocks, limestones and sandstones.

"Along the front of Mounts Holmes and Huntley and of Trilobite Point are exposures of the Archaean rocks, granite and gneiss.

"The tourist route now lies almost wholly in the rhyolite rocks until Hayden Valley is reached. The appearances of this rock are very varied, one of the extreme forms being seen in Obsidian Cliff. In some places the rock is hard and weathers well, but as a general thing it is soft. This is the case in the picturesque exposures at Virginia Cascades and in the Gibbon Cañon above the falls, although at the sites of both these cataracts the rock is hard enough to resist the action of the water.

"All over the high plateau the road work has encountered a rock which is



THE UPPER BASIN.

largely glassy rhyolite or obsidian, and although it can be removed only by blasting, it crumbles to pieces upon exposure. This characteristic accounts for the fact that in passing through the forests where this rock mostly abounds, one would not suspect its presence except by digging into the ground. This condition prevails all along the road between Norris and the Grand Cañon.

"Along the shore of the Yellowstone Lake the road passes over lacustrine deposits for considerable distances, which were laid down when the lake stood at its ancient level.

"Along the Yellowstone River from Mud Geyser to the head of the rapids

the road lies all the way in glacial drift, which indeed extends along the river amid outcroppings of rhyolite to below the site of the Grand Cañon Hotel.

"The Grand Cañon is carved through decomposed rhyolite.

"On leaving the Grand Cañon Hotel from Mount Washburn, the road across the undulating plain to the base of the mountain lies in glacial drift which overspreads in a thin coat the underlying rhyolite.

"Where the road crosses the east fork of Cascade Creek and begins the ascent of the mountain, it enters the area of andesite rocks in the form of the early basic breccias.

"The road continues in this rock to the summit of the mountain and down



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KLAMER'S STORE, UPPER BASIN.

the northern slope to within three miles of Tower Creek, where it again comes into an area of rhyolite.

"Glacial drift is everywhere found in the lower valley of Tower Creek.

"Andesites compose the bed of the Yellowstone all along the lower course of the Grand Cañon. Below Tower Falls this is capped by a conglomerate of 'gneissic and andesitic pebbles in friable sandstone,' and this by a wonderful wall of columnar basalt.

"Rising from the bottom of the cañon a mile below Tower Falls is a stately,



RED ROCK, GRAND CAÑON.

isolated column of rock that has resisted the wear of time. It is 260 feet high, but does not rise to the level of the basalt.

"The road from the Yellowstone to the top of Crescent Hill divide lies mainly in the early acid and basic breccias, or andesitic lavas.

"All over these portions of the Park, beginning on the northern slopes of Washburn and extending east to Soda Butte, the ground is strewn with 'specimens' of various sorts, agate, chalcedony, onyx, jasper, garnets, amethyst, etc. The names Specimen Ridge, Garnet Hill, Amethyst Creek and several others took their rise from this circumstance.

"The ride across the high plateau from Crescent Hill to the Gardiner River is everywhere through the glacial drift, but with frequent outcroppings of rock *in situ*. Basalt and early acid breccias (andesite) are prevailing rocks, with an outcropping of limestone near the crest of the slope descending to Black-tail-deer Creek.

"The immediate valley of this stream is composed of rhyolite, but the basalt recurs again along the east Gardiner, and the beautiful Undine Falls is over the rock. The cañon for a considerable

distance along the hillside below the falls is carved out of the same material.

"From the high ground where the road emerges from Crescent Hill Cañon, a splendid view is had of the country across the Yellowstone River. The mountains there are composed mainly of Archaean rocks, and in these are found the only gold and silver veins in the Park."

Nomenclature

The names of the Yellowstone Park are never far-fetched, but always appropriate, requiring no stretch of the imagination to see the Giant's Face outlined against the sky across the Lake, or to discern soft coloring of the Morning Glory; and was anything ever more faithful to its name than Old Faithful! Prismatic Lake has all the colors of the prism beautifully set forth, and the Emerald Pool is as transparently green as the jewel itself, and is a joy of the Irish heart always. The first white man that ever saw any part of the Park thought "Hell" an appropriate appellation for almost anything in that region. Colter's Hell started the fashion, and when that word grew monotonous they changed off to the Devil himself, and his Satanic majesty is as often glibly mentioned as is his dwelling place. He has his Den, Kitchen, Workshop, Elbow and Thumb, Punch Bowl and Frying Pan, Stairway and Slide, Inkstand and Well, Arbor and Bath Tub, and so on *ad infinitum*. But I don't see why they should confine his regions here on earth to Hell's Half Acre, whereas there are thousands of acres that are as hot as—well, sufficiently warm to give excuse to a considerable enlargement of his domain.

"Mere Man," always ready with the harsher method, takes up the Hades idea and sings his song on baser lines; for instance, this is the way William Tod Helmuth tells how the Yellowstone Park was named:

The Devil was sitting in Hades one day,
In a very disconsolate sort of a way.
One could tell from his vigorous switching of tail,
His scratching his horn with the point of his nail,
That something had gone with His Majesty wrong,
The steam was so thick and the sulphur so strong.
He rose from his throne with a gleam in his eye,
And beckoning an agate-eyed imp standing by,
Commanded forthwith to be sent to him there
Old Charon, employed in collecting the fare
Of the wicked, who crossed the waters of Styx,
And found themselves soon in a deuce of a fix.

Old Charon, thus summoned, came soon to his chief.
As the Devil was angry, the confab was brief.
Says the Devil to Charon, "Now, what shall I do?
The world it grows worse and grows wicked, too;
What with Portland, Chicago, Francisco, New York,
I get in my mortals too fast for my fork;
I haven't the room in these caverns below;
St. Peter, above, is rejecting them so.
So hie you, my Charon, to earth, far away.
Fly over the globe without any delay,
And find me a spot quite secluded and drear,
Where I can drill holes from the center in here.
I must blast out more space; so survey the spot well,
For the project on hand is the enlargement of Hell.

"But recollect one thing, Old Charon, when you
 Can locate the district where I can bore through,
 There must be conveniences scattered around
 To carry on business when I'm above ground.
 An 'ink-pot' must always be ready at hand
 To write out the names of the parties I strand.
 There must be a 'punch-bowl,' a 'frying-pan,' too,
 A 'cauldron' in which to concoct a 'ragout.'
 An 'old faithful' sentinel showing my power
 Must shoot a salute on the earth every hour;
 And should any mortal by accident view
 The spot you have chosen, why, this you must do:
 Develop a series of pools, green and blue,
 That while these poor earth bugs may beauties admire
 They'll forget that below I'm poking the fire.
 Now fly away, Charon, be quick as you can,
 For my place here's so full that I can't roast a man."

To earth flew fleet Charon, to regions of ice;
 He found these too cold—so away in a trice,
 He sought a location in Africa's sands;
 He prospected, and finding too much on his hands
 He cut out Australia, Siberia, too,
 The north part of China—no! they would not do;
 Till just as about to relinquish the chase
 He stumbled upon a most singular place.
 'Twas deep in the midst of a mountainous range,
 Surrounded by valleys secluded and strange,
 In a country the greatest, the grandest, the best
 To be found upon earth—America's West.
 Here the crust seemed quite thin and the purified air,
 With the chemicals hidden around everywhere,
 Would soon make the lakes that the Devil desired;
 So he flew to Chicago and there to him wired:
 "I've found you a place never looked at before;
 You may heat up the rocks, turn on water, and bore."

Then the Devil with mortals kept plying the fire,
 Extracting the water around from the mire,
 And boring great holes with a terrible dust,
 Till soon quite a number appeared near the crust.
 Then he turned on the steam—and lo! upward did fly,
 Through rents in the surface, the rocks to the sky.
 Then with a rumble there came from each spot,
 Huge volumes of water remarkably hot,
 That had been there in caverns since Lucifer fell—
 Thus immensely enlarging the confines of Hell,
 And it happens that now when Old Charon brings in
 A remarkable load of original sin,
 That His Majesty quietly rakes up the coals,
 And up spouts the water, in jets, through the holes;
 One may tell by the number of spurts when they come,
 How many poor mortals the Devil takes home.

But Yankees can sometimes, without doing evil,
O'ermatch in sagacity even the Devil.
For not long ago Uncle Sam came that way
And said to himself, "Here's the Devil to pay.
Successful I've been in all previous wars;
Now Satan shall bow to the Stripes and the Stars.
This property's mine, and I hold it in fee;
And all of this earth shall its majesty see.
The deer and the elk unmolested shall roam,
The bear and the buffalo each have a home;
The eagle shall spring from her eyrie and soar
O'er crags in the cañons where cataracts roar;
The wild fowls shall circle the pools in their flight,
The geysers shall flash in the moonbeams at night;
Now I christen the country—let all nations hark!
I name it the Yellowstone National Park."

The mountains for the most part are named for the men who have been identified with the explorations of the Park, as also some creeks, lakes and rivers, while the geysers and some pools, rivers and a few mountains have been named for their various characteristics or form.

Thus, Heart Lake was originally named for Hart Henney, an old trapper; the spelling is accounted for by the fancied shape which in reality does not exist. DeLacy Creek was named for the man who was in such a hurry to find gold that he couldn't take time to look at a geyser within a mile of his camp.

Jackson Lake is in remembrance of David Jackson, a noted trapper of his day, as was Henry Lake for Andrew Henry; Henry and David were in the same business; and Leigh Lake, for Richard Leigh, is in the same category.

Folsom Peak was named for David Folsom, the explorer of 1869.

The Washburn party of 1870 left their names to five peaks of the Park, of which Mount Washburn, the most prominent, is named for the chief; the others are Langford, Doane, Hedges and Everts.

Mount Sheridan was first called Everts by the members of the Washburn party, but later the name Everts was given to the high cliffs just east of Mammoth, near which he was found after being lost so many days.

In the early days it was quite the proper thing to name a mountain or something for yourself and for those of your company, and Captain Barlow did not overlook anything in this regard; he was wise. His peak is near the source of the Snake River.

Captain Barlow was choice in picking out good peaks and mountains for distinguished men; he named Mount Sheridan, Mount Humphreys and Mount Hancock.

Raynolds Pass is named for Captain Raynolds, the explorer of 1859. Lewis Lake and River are named for Captain Lewis, of Lewis and Clark fame; the other two prominent names are those of the Gallatin Range and Madison River.

Old Jim Bridger's name is perpetuated in Bridger Lake, and Baronett Peak is in memory of the builder of the first bridge over the Yellowstone River.

The Gardiner River's name is of ancient trapper and fur trader origin, coming from one Antoine Gardner, who was in business in this region in 1832.

John Colter has a modest mountain in the southeast corner of the Park, and 'tis well, because every man that followed after, picked out, or his friends and companions picked out for him, a peak or a creek to be called by his



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OLD FAITHFUL.

name, and if the Park had been any smaller there would hardly have been enough to go round. At any rate, Dr. Arnold Hague and Mr. Henry Gannett seem not to have been around while the United States Geological Survey were handing out peaks. Still, many of the sturdy pioneers were entitled to have their names applied as they have been, in memory of their courage and pertinacity, in finding their way through a curious, unexplored region during weeks and months of tiresome trudging while their more effete followers of to-day are sometimes weary over a day's ride.

Yount Peak, named for an old trapper, is more famous as the place of the source of Yellowstone River.

One of the earliest explorers, Al Conant, came near being drowned in a creek, and the incident was considered of sufficient importance to name the creek.

Dr. Hayden could not have chosen for himself, if he had been given the privilege, anything nicer to bear his distinguished name than the lovely valley through which flows the Yellowstone between the Lake and the Cañon.

James Stevenson, one of Dr. Hayden's companions, has a peak of the Absaroka Range and an island in Lake Yellowstone. Other islands are named for Campbell Carrington, the zoölogist, and for Dr. A. C. Peale.

Jones Pass and Jones Creek were named for Capt. W. A. Jones of the expedition of 1873.

Mount Chittenden, as many think it is, is not called for the famous engineer and writer, but for Mr. George B. Chittenden; also Coulter Creek is not for the discoverer, but for John M. Coulter, the botanist. Mount Holmes is for W. H. Holmes, geologist, and Hering Lake for the noted civil engineer, Rudolph Hering.

Gov. John W. Hoyt, chief of territorial Wyoming before it became a state, came up to the Park in 1881 and picked out his peak, and Major Mason of the Governor's escort was honored by giving his patronymic to a creek.

Colonel Norris, one time superintendent of the Park, put his own name for a peak and pass and a basin, and those other prominent features that he did not care for he assigned to his friends. After naming Norris Pass and Norris Basin, he chose Mount Dunraven for himself also; he was not permitted to retain it, however, and was given Mount Norris instead.

Gibbon River was assigned its name by Colonel Norris in honor of Gen. John Gibbon who explored it; it is probable that the General beat him to it.

Dunraven Peak was named by Henry Gannett for the Earl of Dunraven, who was in the Park in 1874, the United States Geological Survey having transferred Colonel Norris' name.

Mount Washburn is a mountain with a name to itself, and most appropriately named for Gen. Henry D. Washburn, Surveyor-General of Montana and chief of the expedition of 1870. Mount Washburn is just west of the Cañon, and the ride to the summit is, I believe, the finest drive in the world.

Bunsen Peak is in full view from Mammoth, and the drive passes under the shadow of its cliffs and the Golden Gate. Named for the eminent chemist and electrician.

It was a pretty compliment to give to that eminent artist, Mr. Thomas Moran, one of the Tetons, that it should be known by his name. Mount Moran is in a most picturesque region, not in the Park but south of it and in the view from the Circuit Drive.

Mount Huntley is in the Gallatin Range in the northeast of the Park; in all the history of it, if there is a man that should have his name set high on the mountains of the Park, as a recognition of his efforts for the benefit and

enjoyment of the people, it was "Si" Huntley. Mount Huntley was named for S. S. Huntley, a pioneer transportation man of the great west, and with his associates organized the present most efficient stage company.

Mount Schurz was named for Carl Schurz, Lamar River for L. Q. C. Lamar, both Secretaries of the Interior under President R. B. Hayes and President Cleveland, respectively.

Kepler Cascade was another of Colonel Norris' presents to a son of Governor Hoyt.

Abiathar Peak was named for Charles Abiathar White, paleontologist of the Geological Survey.



WATCHING A LITTLE ONE.

Virginia Cascade was named for a daughter of Charles Gibson, once president of the Yellowstone Park Association.

Mary Lake and Mary Mountain were named for Miss Mary Clark, a member of a party of tourists in 1873.

Mary Bay for Miss Mary Force.

Frank Island for Frank Elliott of the Hayden (1871) party.

Isa Lake and Craig Pass on the Divide are named for the first two tourists to travel that way.

Absaroka Range, those splendid hills east of the Lake, rejoices in an Indian name, so christened by the Crows.

Bannack Peak was so called for the Indian tribe of that name; Joseph Peak was named for Chief Joseph of the Nez Percés.

Nez Percé Creek was named for the Nez Percé tribe of Indians.

Sheepeater Cliffs, we are again indebted to Colonel Norris for a name other than his own; he called them thus in honor of the Sheepeater Indians. They, the cliffs, are on the Gardiner River just east of Osprey Falls.

Indian Creek is a small tributary of the Gardiner near the Bannack trail.

Indian Pond is near the Yellowstone Lake, north shore.

Shoshone River was the original of John Colter's Stinking Water, though its clear pure water never called for any such name; it was the odor from the Tar Spring that disturbed Mr. Colter's olfactories, and it was so bad that John thought it was the river.

Shoshone Lake and the River were named for the Shoshone Indians who inhabited the region round about. At one time it was called Washburn Lake and later Madison Lake, and it is to this lake that the Act of Dedication refers. Now it is called the Shoshone, and some of these days when some member of Congress stumbles on to the fact, he will rise upon his feet and offer a resolution to Amend an Act, entitled an Act of Dedication of The Yellowstone Park, by striking out the word "Madison" where it occurs in said act and inserting instead thereof the word "Shoshone." Then the resolution will go to the "Committee on Geography of the Park" and as the members of that committee will probably not know anything about it, it will be pigeonholed and the old Madison Lake will go on being called Shoshone as before, and the west boundary will also remain fifteen miles west of Shoshone Lake, though the act says Madison.

Calfee and Miller creeks were named by the namer-general Colonel Norris in honor of Mr. Calfee, the photographer, and Mr. Miller on account of his, Miller's, rapid descent of that creek in front of a band of Indians who were trying to overtake him.

Cache Creek was named on account of Austin's party of goldseekers having "cached" their baggage to prevent its being carried away by Indians.

Atkins Peak is named for J. D. C. Atkins, once an Indian Commissioner.

The goldseekers left such legacies as Hell Roaring, Slough and Crevice creeks in the north portion of the Park.

Electric Peak, from the very nature of things, escaped being named for any man. The highest mountain in the Park, with its summit nearly twelve thousand feet above sea level, was so surcharged with the electric current that Mr. Henry Gannett could think of no other name and hurried to christen it before Colonel Norris could assign or appropriate it.

Roaring Mountain gets its name from the sound of escaping steam from the many fissures on its slopes, but you have to stand very still and remain very quiet to discover anything like a roar, though in the early days it may have roared instead of hissing as it does to-day.

Factory Hill is so named on account of the many jets of escaping steam round about.

Sepulcher Mountain is named for the tomb-like stones that appear on the north side of the peak.

Elephant Back, as may be surmised, is from its shape, more or less, from the point of view.

Index Peak and Pilot Knob are in the northeast of the Park. Dr. Hayden says the Peak is like a closed hand with the index finger pointing upward, while the Knob may be seen from such distances on all sides that it pilots the traveler on his way.

Cinnabar Mountain, near the North Gate, gets its name for the red iron-ore color or cinnabar.

The Tetons received their name from French trappers nearly a hundred



years ago, from a supposed resemblance to the breasts of a human, and all the explorers and mountain climbers have let the name alone; the high peak was named for Dr. Hayden by the Geological Survey, but he very properly declined the honor.

Riddle Lake was so named because the hunters and trappers found it hard to guess in which direction its waters escaped, to the Pacific or Atlantic slope.

Delusion Lake was, until later years, supposed to be an arm of Lake Yellowstone. Surprise Creek, because the course of the creek surprised the hunters and trappers when it was found to be in wholly a different direction from what they supposed. Solution Creek is the solving of Riddle Lake. Boone Creek was named for Daniel Boone No. 2, otherwise known as Bob Withrow, an Irish pioneer.

Fire Hole River derives its name from the innumerable hot springs that



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THE SPONGE.

bubble up from beneath its cold waters and send out little jets of steam; no matter if the old trappers did call it Burnt Hole from the forest fires in that valley in the late twenties of the last century. The Fire Hole River it is, because of the fire holes in its bed and for nothing else; it is the most distinctively appropriate name in the Park, except it may be Fire Hole Lake.

Fire Hole Lake is a lake of fire holes emitting blue blazes in globules of sulphuric looking fire, the most astonishing phenomena in the world. This wonder of wonders is in the Lower Basin district.

Tower Falls is in the scenic district to the north of Mount Washburn, so called from the towering rocks of the cañon about the falls.

Sylvan Lake gets its name from the lovely location and the beauties of its waters.

Violet Creek runs through the violet beds of Hayden Valley. Maiden Hair Brook is a name that has never been in print till it appeared on this page, and not one of the old-timers, from John Colter to Larry Matthews, ever heard of it; it has even escaped Colonel Norris, and yet every traveler who has passed over the Circuit Drive south of Obsidian Cliff has seen this pretty little stream right at the roadside, its clear rushing waters floating long slender threads of bright green grass, bending with the water's force like the newly combed hair of a woman. There's a sign by this brook giving it a name, but its letters do not spell the name a girl gave it.

Obsidian Creek has its headwaters near Norris Basin and runs in the direction of the cliff of that name. Outlet Creek was the outlet of Yellowstone Lake in the long centuries gone by when the lake's waters flowed the other way.

Soda Butte Creek is in the northeast corner of the Park and is so called for the extinct, mound-like crater near its mouth.

Tangled Creek, in the Lower Geyser Basin, is a tangle of little streams that flow from the numerous springs round about.

Pelican Creek, on the north side of the Yellowstone Lake, is the home of the pelicans that flock there in hundreds.

Trade Mark Creek is on the west side of the Circuit Road in Hayden Valley, between the Lake and the Cañon. It is not written down by the chroniclers of the Park by this name, but any driver can show you the handsome trademark of the Northern Pacific Railway delineated in the graceful bends of the streams. The real name is Trout Creek.

Atlantic and Pacific Creeks have their source in Two Ocean Pass, twenty miles south of Yellowstone Lake; the waters flow in opposite directions down the two slopes. This is not to be confounded with the so-called "two ocean pond" on the Circuit Drive between Old Faithful and the Lake. Two Ocean is a favorite name in that part of the Park, and it appears with more frequency than accuracy. There are Two Ocean Pass, correct; Two Ocean Lakes and Two Ocean Pond, the latter two, doubtful.

The geyser names appear in the Geyser chapter.



THE 85-FOOT BOAT, NOW BUILDING, FROM BUILDERS' DRAWING.

Who's Who and Why?

This chapter of "Who's Who and Why?" will enable the reader to locate those names prominently mentioned in connection with the Yellowstone Park. The paragraphs referring to these personages are written in alphabetical.

CAPT. GEORGE S. ANDERSON, Sixth Cavalry, United States Army, was Superintendent of the Park from 1891 to 1896. During his term of six years the Park was steadily improving under an intelligent administration. Poaching in the Park received its deathblow under Captain Anderson's plan to capture the poachers, among whom was the notorious Ed Howell, captured by Burgess and Troike of Anderson's command.

CAPT. J. W. BARLOW of the United States Engineer Corps, was in charge of one division of the expedition of Dr. Hayden in 1871. Captain Barlow's collection of photographs, letters, etc., was destroyed in the great Chicago fire of that year, but the report was rewritten for the *Chicago Journal* and appeared in the issue of that paper for January 13, 1872. Barlow Peak was named for the Captain.

C. J. BARONETT was a noted scout and guide in the pioneer days; he built the first bridge over the Yellowstone River. The present structure is called by his name; he also has a peak named for him. He was known as Jack Baronett.

GEORGE BRECK, for many years prominent in stage transportation of the Northwest, is now (1909) Superintendent of Transportation of the Yellowstone Park Transportation Company, a genial, courteous and most competent official, and one whose acquaintance is valuable in Park affairs.

JAMES BRIDGER was a trapper and fur trader of the Northwest in 1824, and for many years thereafter; he knew more of the Park region than any man of his time; his wonderful stories were related to John Bradbury, H. M. Brackenridge and to Gunnison, all writers of note of that period, who risked their reputations by publishing accounts of Bridger's travels, as the stories came to be called "Old Jim Bridger's lies," but Jim Bridger lived till the world found out that all his were not fairy stories, and more than one editor had to apologize. James Bridger was born in Richmond, Virginia, in 1804, and died in Washington, Missouri, in 1881. He was a man of wonderful memory and fine ideas of topography, and rendered valuable assistance to the early mapmakers.

F. A. BOUTELLE was responsible for the first fish plant in the Park.

ROBERT WILHELM BUNSEN, the eminent inventor and chemist, was an authority on the whys and wherefores of geyser action, his deductions being based on his observations of the phenomena in Iceland and in the Yellowstone Park. Bunsen Peak is just south of the Mammoth Hotel.

ROBERT E. CARPENTER of Iowa, fourth superintendent, appointed August 4, 1884. Removed May, 1885, for the assumption of the idea that the Park was "for the benefit and enjoyment of the people," and that he and his associates were "the people."

HARRY W. CHILD, President of the Yellowstone Park Association and of the Yellowstone Park Transportation Company, was associated with S. S. Huntley in the organization of these enterprises, is now and has been at the head of the management since the beginning. A shrewd business man of the most genial qualities, who may point with pride to the success of his efforts in the creation of the finest and best equipped stage transportation equipment in the world. This, with the Association hotels, also under Mr. Child's management, goes far to carry out the words of Congress that the Yellowstone Park is "for the benefit and enjoyment of the people," for, to feed them, house them and carry them safely over has been his work, well done.



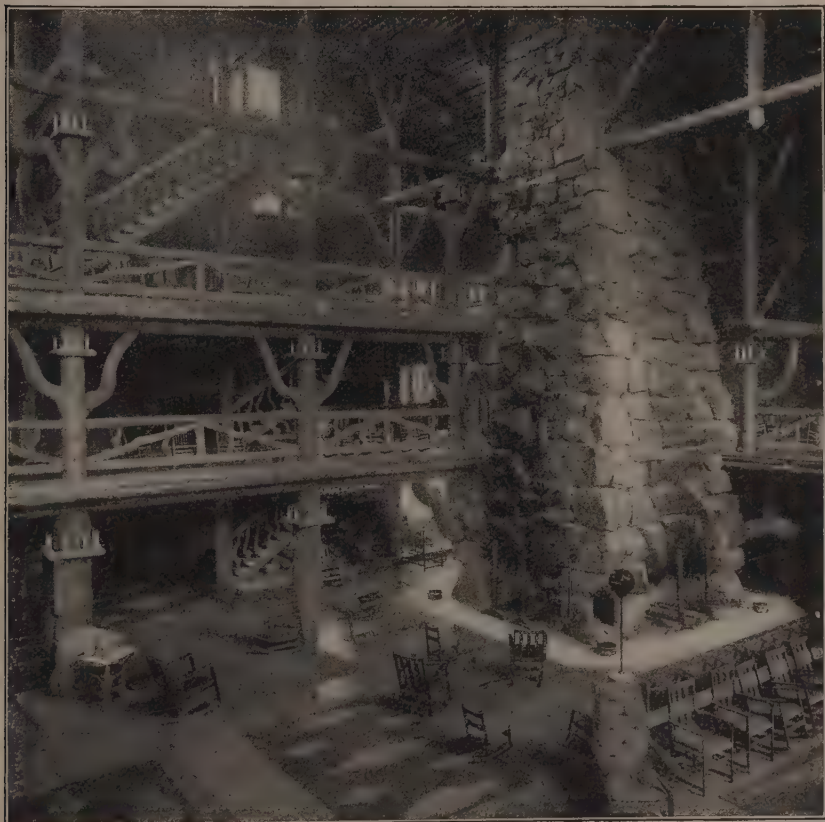
EAST VIEW, OLD FAITHFUL INN.

HIRAM MARTIN CHITTENDEN, Lieutenant-Colonel Corps of Engineers, United States Army, eminent writer and author of the most comprehensive work on the Yellowstone Park, had no peaks, creeks or valleys honored by his distinguished name, but every road and byway of the Park shows evidence of his skill as an engineer, as their present excellent condition is due largely to Colonel Chittenden's work in their building up, grading and ballasting.

Mount Chittenden in the Absaroka Range was named for Geo. B. Chittenden, but Hiram Martin Chittenden needs no peak or stream to perpetuate his name; his work in the Park will endure and live after him, as will his writings that have become classic in the literature of the West. His book "Yellowstone" is the book of the Park, interesting from cover to cover, with not a

dull page, but all teeming with valuable information for the traveler and the student as well, and it would be well for both to have the book.

HON. WILLIAM H. CLAGETT, the newly elected delegate to Congress from the territory of Montana, introduced in the House of Representatives, December 18, 1871, the bill known as the "Act of Dedication," setting apart certain lands near the headwaters of Yellowstone River as a park, and on



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THE LOBBY, OLD FAITHFUL INN.

the passage of that bill, the Yellowstone Park was created, so Mr. Clagett may be written down as the father of the Park legislation in Congress, but withal Mr. Clagett has no creek or peak in the Park.

JOHN COLTER was the first white man to enter the region of the



THE FIREPLACE, OLD FAITHFUL INN.

Yellowstone Park, the first to report of its wonders, and his were the first stories to appear in print.

After his adventures in the Yellowstone country he married and settled in Missouri, where he died in 1813. John Colter was the discoverer of the Yellowstone Park.

PROF. THEODORE B. COMSTOCK, the geologist, was a member of the expedition of 1873, and made an interesting report, including his opinion on geyser action.

AL. CONANT was a pioneer of 1865; came near being drowned in his own creek in the southwest corner of the Park.

PATRICK H. CONGER of Iowa was the third superintendent of the Park in 1882.

GEORGE F. COWAN was the first victim of attempted massacre by the Indians in the Yellowstone Park. He was shot down, left for dead, but finally recovered; his wife, wife's sister and brother were made captive but were released by the Nez Percés in 1877.

E. C. CULVER, one of the picturesque characters of the Park, went into the Park with Mr. E. C. Waters in 1887 as Master of Transportation, which office he held until it was abolished in 1892; during that time he moved the steamboat Zillah from Cinnabar to Lake Yellowstone. In 1893 Mr. Culver had charge of the Lunch Station at Norris. A year later he went into the employ of the Yellowstone Park Transportation Company.

Mr. Culver became Train Agent for the Yellowstone Park Association in 1895 and continued in that position till 1907. The traveler of that period will remember the very pleasant impromptu talks about the route and the Park as he passed through the train from Livingston to Cinnabar and Gardiner. These little train talks developed Mr. Culver's descriptive and oratorical powers, and the Yellowstone Park Association sent him on a lecture tour throughout the country; his route included the Jamestown Exposition and the larger towns and cities of the middle, eastern and southern States, where he delivered 286 lectures with views and motion pictures of the Yellowstone Park. Mr. Culver retired July 1, 1908, on account of ill health.

J. H. DEAN was the pioneer Superintendent of Hotels of the Yellowstone Park Association. Managers of all hotels reported to him. Under Mr.

Dean's administration the hotels attained a fine reputation for cleanliness, good order and fine cuisine, which reputation abides until this day.

CAPT. W. W. De LACY was the leader of the expedition of 1863; his report was an interesting one, but was not published until a dozen years after. He found and named De Lacy Creek.

FATHER DeSMET, a noted Jesuit missionary, traveled in the middle of the last century. His letters dated at the University of St. Louis in 1852 gave important data, and he was the first to give a correct latitude and longitude of the Yellowstone Park.

LIEUT. GUSTAVUS C. DOANE was in command of the escort of the expedition of 1870. In company with N. P. Langford he was the first white man to reach the summit of the Absaroka Range; one of the peaks of the range now bears his name. His splendid reports are the most often quoted of all that have been made of the Yellowstone. His descriptions are written in clear, concise words and are most interesting. Lieutenant Doane had the distinction of having made the first official report to the Government.

Lieutenant Doane was born in Illinois, May 29, 1840, died at Bozeman, May 5, 1892. For the Civil War, he enlisted with the "California Hundred," joined a Massachusetts Cavalry regiment, was mustered out as First Lieutenant in 1865 and appointed Second Lieutenant, United States Regulars, in 1868, remaining in service till his death, after attaining the rank of Captain.

LORD DUNRAVEN, the noted English peer, visited the Park in 1874.

Speaking of the Act of Dedication, he said: "All honor then to the United States for having bequeathed as a free gift to man the beauties and curiosities of Wonderland. It was an act worthy of a great nation, and she will have her reward in the praise of the army of tourists, no less than in the thanks of the generations of them yet to come."

HON. TRUMAN C. EVERTS was a member of the expedition of 1870 during its first few days of exploration, when he became the victim of the most thrilling incident in the history of the Yellowstone Park; he became lost from the party and after wandering helplessly in the wilderness for thirty-seven days, was found in a starving condition near the mountain which bears his name, by Jack Baronett.

T. E. FARROW, now Superintendent of Hotels for the Yellowstone Park Association, began service in the Yellow-



A COSY CORNER, OLD FAITHFUL INN.



NEWEL POSTS, OLD FAITHFUL INN.

inction in Park annals. He has part of the honor with Cornelius Hedges in originating the Park idea. Mr. Folsom's letters containing his proposition were burned in the Chicago fire. Mr. Hedges' letters were printed and his plans went direct to Congress. One of the peaks bears Mr. Folsom's name.

JOHNSON GARDNER was an independent trapper in 1832. From his business records the name of Gardiner River, though spelled different, has been traced to him.

GEN. JOHN A. GIBBON, U. S. A., was in command of an expedition in 1872, and five years later was engaged in the campaign against the Nez Percé Indians. The Gibbon River was named for the General.

GEN. U. S. GRANT, President of the United States, signed the Act of Dedication, 1872.

DR. F. V. HAYDEN was a member of the expedition of Captain Reynolds, 1859 to 1862, as surgeon, naturalist and geologist, and from 1879 to 1886 was connected with the United States Geological Survey, and made the noted expedition of 1871. He was one of the most conscientious and painstaking of the workers for the Park. The beautiful valley between the Lake and the Cañon is named in his honor.

F. JAY HAYNES, President of the Monida and Yellowstone Stage Company,

stone Park as clerk in the Mammoth Hot Springs Hotel, afterwards became manager of that hotel, and then for his ability and efficiency was promoted to be Superintendent of Hotels, and as such has supervision over all the hotels and lunch stations in the Park, all managers reporting direct to him.

Mr. Farrow has his headquarters at the Mammoth Hotel, but he is on the road much of the time. He has a fine team assigned for his exclusive use and he is able to reach any point in his territory on the shortest notice. If you meet a buggy driven by a healthy looking young man without a hat, that's Farrow. He has a hat, but I don't remember ever to have seen him with it on.

W. A. FERRIS was a clerk in the employ of the American Fur Company in 1834, and in his travels visited the geyser basins and sent to the papers of the period interesting accounts of the Park.

W. A. FOLSOM was a member of the expedition of 1869 and a writer of distinction.

the M-Y Co., has been connected with Park interests for many years. He was the authorized official photographer of the Yellowstone Park for more than a score of years and was with President Arthur during his tour of the Park. Mr. Haynes made two perilous winter trips through the Park, one in 1887, the other in 1894; his photographs were the finest ever made and his pictures have gone all over the world. By his energy and perseverance he has made a success of the M-Y stage line from the West Gate. It was hard pulling with the long drive from Monida to Dwelle's, but Haynes was confident that the railroad would come to the Park boundary and it did.

CAPT. D. P. HEAP was with Dr. Hayden in the expedition of 1871.



THE DINING-ROOM, OLD FAITHFUL INN.

CORNELIUS HEDGES may rest on his laurels as the originator of the Park idea and his efforts in that direction till his proposition was adopted in the Act of Dedication. Mr. Hedges was a member of the expedition of 1870. Hedges Peak was named in his honor.

T. E. HOFER, better known as "Billie Hofer," is President of the T. E. Hofer Boat Co., operating on Lake Yellowstone. He has been in the Yellowstone country since 1877; he went west in 1872, spent five years in the Black Hills and Colorado, then to the mountains and entered the Park in 1878 where he became most favorably known as a scout and guide, a genial soul with a noted honesty of purpose. Mr. Hofer also owns the store concession at the Lake.

GEN. O. O. HOWARD passed through the Park in 1877, hot on the trail of

the Nez Percé Indians, in a campaign that put an end to Indian depredations forever.

HON. JOHN W. HOYT, Governor of Wyoming, made an expedition into the Park in 1881, in an effort to find a route for a road from the southeast, which at this writing has had no material results, but the Governor secured a peak to be named in his honor, and a cascade for his son Kepler.

SILAS S. HUNTLEY, known to his friends as "Si" Huntley. He was that genial, good-natured kind of a man that is rarely called "Mister" after you have known him a few hours. It always seemed rather a distant, formal salutation to say Mr. Huntley, so it was most always just "Si." The good that he did for the Park lives after him in the building up of the Yellowstone



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A STAIRWAY, OLD FAITHFUL INN.

Park Transportation Company to stand in the front rank of all the others in the world. His work is written of in other pages of this book. Mr. Huntley died in 1901. Mount Huntley is a monument to his memory, none too high.

CAPT. W. A. JONES was in command of the expedition of 1873. He took his party through and over the Absaroka Range, the first to perform that difficult feat. Jones Creek and Jones Pass record his path and his memory. Captain Jones verified the existence of Two Ocean Creek.

CHIEF JOSEPH of the Nez Percés did not do much for the Park except in a rather doubtful advertising way, but he has a peak with his name. Billie Hofer says Joseph was a fine old man and a general.

CAPT. D. C. KINGMAN of the U. S. Corps of Engineers was in the Park from 1883, during which time he laid the foundation of the system of roads.

H. E. KLAMER has been in the Park many years and is well and favorably known as the proprietor of the beautiful curio store near Old Faithful Inn at the Upper Basin.

NATHANIEL PITT LANGFORD, also called from his strenuous and faithful work, "National Park Langford." He never left off his work in behalf of the Park idea until the dedication bill was passed. He was at various times Governor of Montana, one of the "Vigilantes," member of the expedition of 1870, first superintendent of the Park, and between times a banker and business man, and withal the author of most interesting works pertaining to the Park and the Northwest. Mount Langford is very properly named for a man so distinguished.

RICHARD LEIGH, better known in those days as "Beaver Dick," not, however, for his prowess in pursuit of the beaver, but from the likeness of



THE WALK WITH JOE.

Dick's teeth to those of the animal that was so important to his welfare. Leigh Lake remains in honor of his name.

CAPT. WILLIAM LUDLOW made an expedition into the Park in 1875, securing accurate measurements of the Yellowstone Falls. His report was a valuable one.

MAJ. JULIUS W. MASON, U. S. A., was in command of the escort of Governor Hoyt of Wyoming in 1881.

MR. LAWRENCE MATTHEWS is the unrecognizable name of "Larry"—Larry of Norris Lunch Station, Larry of the Tents at the Upper Basin, Larry of Old Faithful Inn, and for years as much of an attraction as Old Faithful. But Larry has gone from the Park, leaving a fragrant memory of his jibes and jokes.

C. J. McCARTNEY, or Jim McCartney, had the double distinction of having built the first hotel in the Park and the only settler within the Park boundaries; he was there and had his house built before the Act of Dedication was passed, and the United States had to pay him \$5,000 for his "hotel." Jim McCartney died at Livingston, Montana, in 1907.



KEPLER CASCADE.

THOMAS MORAN, the eminent landscape artist, made studies in the Park for the famous picture in the Capitol at Washington. He said of the Grand Cañon: "Its beautiful tints are beyond the reach of human art," to which General Sherman added: "The painting by Moran in the Capitol is good, but painting and words are unequal to the subject."

COL. PHILETUS W. NORRIS was the second Superintendent of the Park, appointed from Michigan in 1877. As Chittenden says, "The Colonel left his mark and his name in almost every part of the Park. He was a tireless worker and an energetic explorer; he was supplied by Congress with the means and commenced the building of roads and general improvement, but his propensity for naming things was most prominent." Colonel Chittenden says the race in name-giving was between Col. P. Norris, the United States Geological Survey, and "that mythical potentate of whose sulphurous empire this region is thought by some to be simply an outlying province;" the last named won, with the Colonel a close second. But Colonel Norris was a worker and is entitled to leave his name to record a good administration.

MAJ. JOHN PITCHER of the Sixth United States Cavalry was the very efficient and popular Superintendent of the Yellowstone Park from 1902 to 1906. During his incumbency great improvements were made in the Park. Fish hatchery established, alfalfa field for feeding animals started and buffalo given a home in the Park, old roads were graded and

ballasted, new roads built. It was by Major Pitcher's order that the catch of fish in Yellowstone Lake was limited to twenty-five by any one person. He was a capable superintendent and a popular officer during his five years' residence in the Park.

CAPT. W. C. RAYNOLDS, United States Topographical Engineers, made two expeditions into the Park in 1859 and 1860; the first was cut short by the heavy snow in June, the second by the war between the States. His reports were filed immediately after his return and his map published, but the reports were not printed till 1868.

HON. THEODORE ROOSEVELT was in the Yellowstone Park in 1903, and assisted at the laying of the cornerstone of the arch at Gardiner, the North Gate, in April of that year.

GEN. PHIL. SHERIDAN took a hand in arrangement in Helena, Montana, for a military escort for the Washburn expedition in 1870. The General was in the Park region again in 1881, 1882 and 1883, and made an urgent appeal for definite action for the protection of the Park.

GEN. W. T. SHERMAN was in the Park in 1877, and although he said in his letter to the Secretary of War, "We saw no signs of Indians and felt at no moment more sense of danger than we do here," the Nez Percés were not more than half a dozen "sleeps" in his rear, and until it was all over the General did not know the real danger he was in.

CAPT. W. F. SPURGIN, Twenty-first Infantry, U. S. A., was with General Howard in the Nez Percé campaign in 1877 as Engineer Officer in command. His was the difficult task to precede the army, cut down trees, make as much of a road as possible for the army wagons, a task that was marvelously performed. Traces of the road are still visible, and "Spurgin's Beaver Slide," as the soldiers called it, is pointed out, and a tablet is erected to mark the spot near the Upper Falls where the energetic Captain let his wagons down a steep hill with ropes.

JAMES STEVENSON was Dr. Hayden's chief lieutenant; his name is perpetuated by a peak of the Absaroka Range and an island in Lake Yellowstone.

MRS. H. H. STONE of Bozeman, Montana, was the first woman to visit the Yellowstone Park. She came in 1872 and followed the route of present-day travel.

JAMES STUART, with a force of seventy-three men, was in the Park country in 1864 after gold and Indians.

GEN. HENRY D. WASHBURN, Surveyor-General of Montana, was chief of the expedition of 1870. He had been a soldier in the Civil War, rising from the ranks in 1861 to Brevet Brigadier-General in 1865. He died a few months after his return from the Park, at his home in Clinton, Indiana, January 26, 1871. His writings on the Park stand high in its literature. Mount Washburn commemorates his name.

E. C. WATERS was from 1890 to 1907 the holder of the concession for boats on the Yellowstone Lake, operating from the Thumb Lunch Station to the



Lake Hotel, for fishing and row boats, and he also had the store privilege at the Lake.

W. W. WYLIE established in 1890 the Wylie Permanent Camping Company, and was its leading spirit until 1905, when he sold his interest. Mr. Wylie by his honesty of purpose, geniality and good management did much to popularize the camping tours. He sold out to capable business men experienced in Park travel, and the business thrives under the Wylie name.

"UNCLE" JOHN YANCEY lived for many years in Pleasant Valley, in a rude house where the latch-string always hung on the outside, and the tired traveler made welcome. Who has heard of the Yellowstone Park has heard of "Yancey's."

GEN. S. B. M. YOUNG, in 1897, was Colonel of the Third United States



AT THE OUTLET OF LAKE YELLOWSTONE.

Cavalry and Superintendent of the Park, and in 1907-8 General Young was again Superintendent.

General Young's administration of Park affairs is recognized by the Government and the people as most efficient; his executive ability and untiring energy have brought the Park to a high standard from every point of view.

Personally affable and courteous, the General has a strong hold on the respect and affection of all those about him, as well as that of the transient traveler.

General Young's reports to the Secretary of the Interior are full and complete to the minutest detail, making the most entertaining reading for the Park student, and adds material to the history of the Yellowstone Park.

YOUNT was an old trapper of the earliest days; his other name is not noted in the archives, but he is commemorated in Yount's Peak at the source of the Yellowstone River.

Chronological

- 1797—David Thompson was among the Mandan Indians on the Upper Missouri River; he was the first to use the name, Yellow Stone, in English, as applied to the river known to the French as Roche Jaune.
- 1803—The northern portion of the Yellowstone Park was ceded to the United States by France under the terms of the Louisiana Purchase.
- 1804—The Lewis and Clark expedition left St. Louis, May 14th.
- 1805—Lewis and Clark expedition to the Pacific Coast passed near the Yellowstone Park but did not know of its existence.
Lewis and Clark arrived at the mouth of the Yellowstone River.
- 1806—August 17th, John Colter left the Lewis and Clark expedition at Fort Mandan to engage in trapping along the tributaries of the Missouri.
- 1807—John Colter first saw the Yellowstone Lake, and was the first white man to see and to travel through the Yellowstone Park. Discovered the Tar Spring, now called "Colter's Hell."
- 1810—Colter returned to St. Louis in a canoe, down the river 3,000 miles in thirty days, and told the story of his discovery of the Yellowstone Park.
- 1811—Colter married in Missouri. The *Louisiana Gazette*, St. Louis, February 28th, publishes first reference to the geysers, by Henry M. Brackenridge.
- 1813—John Colter died, near St. Louis.
- 1819—Inscription made on a tree near the Upper Falls of the Yellowstone reads: "J O R August 19; 1819."
- 1829—Joseph Meek, a noted trapper, first saw the "country smoking with vapor from boiling springs and burning with gases issuing from small craters."
- 1830—James Bridger visited the Yellowstone Park. His descriptions were later written up for publication but suppressed because of their improbability.
- 1834—Warren Ferris, an employe of the American Fur Company, visited the Yellowstone Park, and from his journal a most accurate description of the Upper Geyser Basin was published in the papers of the period.
- 1847—Mexico ceded the southern portion of the Yellowstone Park to the United States under the terms of the Treaty of Guadalupe-Hidalgo.
- 1851—Father De Smet visited the Park region and gave the first accurate geographical location.
- 1852—The first authentic story of the Park as related by James Bridger was published.
- 1859—The first Government expedition to the Park region was ordered, partially made in that year and 1860 under Capt. W. T. Reynolds, U. S. A., with Dr. F. V. Hayden as geologist, and James Bridger, guide. Captain Reynolds' report is only from hearsay of James Bridger and Robert Meldrum. He circled the Park but did not penetrate the mysterious valley.
- 1863—A party of goldseekers under Walter De Lacy entered the Park region, came to Shoshone Lake and Lewis Lake and Basin, and came near to the Great Fountain Geyser, but didn't see it.



YELLOWSTONE PARK.

- 1864—James Stuart was in the Yellowstone River and Lake district of the Park.
- 1866—George Huston visited the Geyser basins, the Lake and the River, and published the story of their wonders in the *Omaha Herald*.
- 1869—The first real exploring expedition entered the Park region; the party consisted of D. E. Folsom, C. W. Cook and William Peterson. They saw all but the Upper Basin. Their story was published two years later.
- 1870—The Washburn-Doane expedition made the first complete exploration of the Park region; the party was composed of Gen. Henry D. Washburn, Hon. Nath. P. Langford, Hon. Cornelius Hedges, Hon. T. C. Everts, Hon. Samuel T. Hauser, W. Trumbull, Benj. Stickney, W. C. Gillette, Jacob Smith and Lieut. Gustavus C. Doane, a sergeant and four privates, and even these missed the famous Mammoth Hot Springs, as they went in by way of Tower Falls.
- Cornelius Hedges was the first to suggest Government control, September 19, 1870, after his companions had discussed private ownership around the camp fire; his suggestion was published November 9, 1870.



CONCORD COACHES.

1871—The first official, governmental expedition, under Dr. F. V. Hayden, entered the Park via Mammoth Hot Springs and discovered the famous Terraces.

The first boat launched on the waters of Lake Yellowstone, the "Annie." Used by the Hayden Expedition.

Bill introduced in the House of Congress by the Hon. W. H. Clagett, delegate from Montana, and in the Senate by Senator Pomeroy of Congress, on December 18th.

The first house in the Park was built by Jim McCartney; it was also the first hotel, as it was built for the entertainment of visitors. The house still stands at the foot of the gulch west of Liberty Cap.

Jack Baronett built the first bridge over the Yellowstone River near Yancey's. He, Yancey, built his house the same year.

Marshall came to the Lower Basin and built three log shacks for use as a hotel.

1872—On the 30th of January the bill creating Yellowstone Park passed the Senate with only one dissenting vote (Senator Cole of California). On February 27th the bill passed the House and was signed by President Grant, March 1st. The success of the bill was largely due to the efforts of Messrs. N. P. Langford, Cornelius Hedges and William H. Clagett. Gen. John A. Gibbon explored a portion of the



TWO-OCEAN POND.

Park. Norris Geyser Basin discovered by E. S. Topping and Dwight Woodruff from the summit of Bunsen Peak, and visited the following day by Mr. and Mrs. H. H. Stone of Bozeman, Montana. Mrs. Stone was the first white woman to tour the Park.

- 1873—Capt. W. A. Jones, U. S. A., Engineer Corps, made an extended tour of the Park. He was the first to find a way to cross the Absaroka Range.
- 1875—Gen. W. W. Belknap, Secretary of War, with Lieut. G. C. Doane, Gen. W. S. Strong and others, made a journey through the Park. Capt. Wm. Ludlow of the Engineers Corps made the first accurate measurement of the Yellowstone Falls.
- 1877—The Nez Percé raid through the Park under Chief Joseph. Gen. W. T. Sherman and staff visited the Park. Gen. O. O. Howard entered the Park "not on pleasure bent," but on the more serious matter of catching up with Chief Joseph and his numerous band of Nez Percé Indians. P. W. Norris of Michigan appointed Superintendent of the Park to succeed N. P. Langford, the first superintendent. The first real roads of the Park were built by Norris. Baronett's Bridge, the first over the Yellowstone River, partially destroyed by the Nez Percés.

The first party of tourists entered the Park in August of 1877, the Cowan party from Radersburg, Montana. All were captured by the Nez Percés; later all escaped to their homes.

1878—Billie Hofer entered the Yellowstone Park as a scout and guide.

1879—The block house on Capitol Hill at Mammoth Hot Springs built by Colonel Norris as a post of defense against the Indians.

1880—Billie Hofer built a "sharpie" and launched it on Yellowstone Lake.

Hon. Carl Schurz and General Crook visited the Park.

1881—Capt. W. S. Stanton, Engineers Corps, made a report on the distances covered by roads and trails.

1882—Gen. Phil Sheridan concluded his tours through the Park, commenced in the previous year.

Patrick A. Conger of Iowa, third superintendent, under whose administration the nefarious Yellowstone Park Improvement Company came to light.

1883—The President of the United States, Gen. Chester A. Arthur, Hon. Robt. T. Lincoln, Secretary of War, Lieut.-Gen. Phil Sheridan, Hon. Geo. Y. Vest, United States Senator from Missouri, made a tour of the Park, and during the season Chief Justice Waite of the Supreme Court and many other distinguished civilians and soldiers visited the Park.

The first annual appropriation for the Park passed by Congress in March. Branch of the Northern Pacific from Livingston



HIS MAJESTY.

to Cinnabar completed. Capt. D. C. Kingman detailed to take charge of roads.

The Cottage Hotel built by S. L. Henderson, brother of Speaker Henderson. The house is now used by drivers and other employes of the Yellowstone Park Association.

Rufus Hatch of New York commenced the building of the Mammoth Hot Springs Hotel. He failed and sold out to the Yellowstone Park Improvement Company, who opened it in 1884.

- 1884—Robt. E. Carpenter of Iowa was appointed Superintendent, but was later removed on account of the Park Improvement scandal. Mammoth Hot Springs Hotel opened.



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THE COLONIAL HOTEL, LAKE.

Wakefield put on a line of Concord coaches for operation from Cinnabar to and through the Park.

- 1885—Col. D. W. Wear of Missouri appointed Superintendent. He was the last of civilian officers.

- 1886—Began the military régime in the Park, by the appointment of Capt. Moses Harris, First United States Cavalry, as Acting Superintendent. Mammoth Hot Springs Hotel sold to the Yellowstone Park Association.

The two small hotels, Lower Basin near Nez Percé Creek, built by Yellowstone Park Improvement Company, now abandoned.

The first coupon tickets for the Park were put on sale by the Northern Pacific Railway.

Herbert built a hotel at the Upper Basin, and in the same year the first hotel at the Lower Basin was built. Both were taken over by the Yellowstone Park Association.

A fine hotel was built at Norris.

1887—The Norris Hotel was destroyed and replaced by a slab shack. F. Jay Haynes made the first winter tour of the Park.

1888—The hotels were sold to the Yellowstone Park Association, who also took over the Cottage Hotel built at Mammoth by S. L. Henderson. Excelsior Geyser ceased active operations.

1889—Cañon Hotel was built.

1890—The Lake Hotel was partially completed, the west end of the structure



THE UPPER FALL, GRAND CAÑON.

was opened for business. The first steamboat, the "Zillah," was hauled by horses from Cinnabar to the Lake. The boat was built in Dubuque, was in service on Lake Minnetonka, then taken to the Park by Captain Waters.

The Mud Geyser had a violent eruption; threw mud 150 feet high. Wylie's permanent camps established.

1891—The Fountain Hotel was opened.

Raymond & Whitcomb took the first party over the Circuit Road.



STAGES AND CAMPERS MEET.

1892—The Yellowstone Park Transportation Company bought the Wakefield outfit of stages, horses, barns, etc.

The Government boat Darling was launched on Yellowstone Lake.

1894—Congress passed the necessary laws for the protection of the Yellowstone Park, regulating leases, privileges, etc.

A notorious poacher was captured in Pelican Valley by Scout Burgess. F. Jay Haynes, the famous photographer, made the second tour of the Park.

1895—June 2d, the first Pullman car from St. Paul arrived at Cinnabar, the then terminus of Northern Pacific Railway for the North Gate.

- 1896—Uncle Tom established his ladders down the gulch from the south side of the Cañon to the foot of the Great Falls. Connection by a rope ferry above the rapids south of the Upper Falls.
- 1898—Building of the Cody Road and bridge over the Yellowstone River near the outlet.
- 1899—Monida & Yellowstone Stage Company commenced operations under the management of F. J. Haynes.
Fountain Geyser changed its base of operations from its pool to the one adjoining.
- 1900—Establishment of tents at the Upper Basin for the accommodation of tourists.
Hotel at Norris built.
- 1901—"Si" Huntley died.
- 1902—Surveys of the Oregon Short Line from Idaho Falls and St. Anthony to Yellowstone began, followed by the construction of a part of the line each year.
- 1903—President Roosevelt laid the cornerstone of the great arch at Gardiner, the North Gate, April 24th.
Completion of the beautiful station of the Northern Pacific Railway at Gardiner.
Completion of the bridge over the Yellowstone River above the Upper Falls.
Great catch of trout in Yellowstone Lake outlet by a party of Cincinnatians, which resulted in the issuance of Superintendent Major Pitcher's order limiting the taking of more than twenty-five fish at one time, by each person.
- 1904—Completion of the road to Artist Point on the south side of the Grand Cañon of the Yellowstone.
Old Faithful Inn opened its doors.
- 1905—Completion of the road to the summit of Mount Washburn.
Colonial Hotel at the Lake completed.
- 1906—Completion of the road from Cañon to Tower Falls through Dunraven Pass.
Stairways, railings and platforms built on brink of the Grand Cañon and to the brink of the Great Falls.
- 1907—Completion of the Oregon Short Line to the Park Boundary West Gate, Yellowstone Station.
Stairway down the gulch replaced Uncle Tom's Ladders to the foot of the Great Falls.
New steamer of E. C. Waters placed in commission on Yellowstone Lake.
- 1908—Stairway on the site of Uncle Tom's Ladders to foot of the Great Falls removed. Echo answers, WHY?
Yellowstone Lake boat and store concession awarded to the T. E. Hofer Yellowstone Lake Boat Company.
First launches on Yellowstone Lake, under the management of Billie Hofer's company.

Jokes and Legends

I think the Yellowstone Park was so far west that it escaped any semblance of a legend, but nothing can ever be too far west to escape a joke. There are in the Park precipitous cliffs in plenty, but none from which forlorn Indian maidens have deliberately and with malice aforethought thrown their more or less tawny and symmetrical selves into the depths below, because their perverse papas insisted on the acceptance of some peculiarly painted chief as against the already, heretofore, selected young athlete of a Hiawatha, who had brought beads and feathers along with his pretty and unpronounceable love words whispered on the dark side of the tepee.

Hence this chapter must be more of the joke than the legend, and as a matter of fact the Yellowstone Park was regarded as a joke in the first place. It was so considered from the time John Colter told his story till Jim Bridger related his yarns, and it was long afterwards found out that they were true stories after all.

Jim Bridger had seen the hot springs and the geysers and he knew no one would believe even the truth, and, further, he knew that any story he might tell was not likely to be disproved, so he mixed his stories up, fact and fiction in equal parts with good grounds for both sides of the story.

The story of catching a fish in the cold water of the lake and cooking it in a hot water pool alongside originated with Mr. Bridger, only the old man's version was that he caught the fish in deep water that was hot near the surface and *the fish was cooked on his way out*. The truth is, any one may, at many places in the Park, catch a fish, and without moving, or taking the fish off the line, cook it in a nearby hot water pool. One place like this is in the Yellowstone Lake at the Thumb Lunch Station.

Shakespeare says: "Travelers ne'er do lie, but folks at home condemn 'em"—and Mr. Bridger was no exception to that rule, but his fault was mostly in exaggeration; he was not content to tell of the petrified trees, but must add petrified grass, petrified flowers and even petrified birds still singing petrified songs in the petrified trees, and his horses and mules had rather a hard feed on the brittle grass turned to stone. When Mr. Bridger came to show these things, behold! the petrified trees were there to prove that he had not prevaricated ("not to use a shorter and harsher word").

The story of the transparency or rather mirror-like composition of Obsidian Cliff was one of Mr. Bridger's exaggerations. He told of this mountain of volcanic glass and illustrated it with a hunting incident of his own; he saw near the cliff what seemed to be an elk quietly feeding along its rugged sides; he just naturally fired at it, once, then again and again, but the elk never moved; he crept up cautiously without disturbing the animal, then he found out that he had been seeing right through a glass mountain and the elk was on the other side of it, and it was not only not plain everyday glass, but of telescopic quality, and the elk he shot at was twenty-five miles away.

A latter day story of Obsidian Cliff that has more of the element of probability, is that the engineers on the Circuit Road found the composition so hard that it was impossible to drill into a part of the cliff jutting into the way

of the road, and they could not blast it out, so they built fires against it, then threw cold water over the sides and the glass "broke away in great chunks," so the narrator told me.

A newcomer to the Park region once asked Mr. Bridger how long he had been there? "Why," said the old man, "do you see that butte over there? Well, when I came here that butte was a hole in the ground."

All others came after, but their stories were as full of local color. Bridger started the alum creek "puckering yarns," but E. C. Culver, the popular train agent and lecturer, put on a polish that made the old stories look like new. He, Mr. Culver, was going through the Livingston-Gardiner train one day delivering his usual lecture about in these words: "We first pass through the Lower Cañon of the Yellowstone. Only a short ride, when we enter Paradise Valley, in which we ride for about twenty-five miles; the Absaroka range of mountains on our left are from eight to ten thousand feet high, the snow remaining frequently through the month of July. After leaving the



MOONLIGHT ON THE LAKE.

beautiful valley we soon enter the middle of 'Yankee Jim' Cañon, so called because James George, better known as 'Yankee Jim,' came here in the early seventies and built the first wagon road to the Yellowstone Park. He is now an old man, still resides in the Cañon and is a famous story-teller. He tells of having a fine pair of field glasses and a good gun. In the cool of the evening he takes his glasses and looking up the mountain-side he sees a bear, a deer, or an elk; taking his gun he shoots it, when it rolls down the mountain-side to his feet. The distance is so long and the friction so great that in rolling down it tans the hide and cooks the meat; this is the way he lives. You smile with incredulity. Don't you know you are entering Wonderland, where you must be sure to have your driver point out to you the most remarkable geyser in the world, for it throws up *hot blocks of ice*, and on your fourth day's coaching from Mammoth Hot Springs you will have a beautiful ride across Hayden Valley, crossing Alum Creek. You know alum will pucker and shrink anything which comes in contact with it. A long time ago a man came along

there driving four very large horses with a big wagon and he forded this creek; when he came out on the opposite side he found the alum water had shrunk his outfit to four Shetland ponies and a basket phaeton. A lady from Chicago heard of this wonderful water and immediately went there wearing number eight shoes, bathed her feet twice and went away wearing number ones." In telling a party about it there happened to be a Chicago lady in the party who sarcastically advised the narrator to go and *soak his head in that creek*. Jim Bridger told of mountain streams having their source in the snow of



BRIDGE OVER THE YELLOWSTONE, GRAND CAÑON.

the summit and ran down so fast that the water became hot from friction by the time it reached the foot of the mountain. As a matter of fact, the stones in the bed of the Yellowstone River below the Great Falls, where the cold water runs very rapidly, are hot, so hot that one can hardly bear the contact with the hand.

"Slim," a driver (I don't know his other name, but he was a jolly good fellow), told me that when he came to the Park that Beaver Lake "was just crowded full of beavers, but they took so many of them to Washington that there wasn't hardly any left now."

At the risk of being caught in some sort of a joke, I just naturally inquired why they should want to send beavers to Washington. "Oh," Slim said, "they wanted 'em for the *theological* garden." I had not thought of such a contingency, and at first I was inclined to be wroth at the idea of removing any animals from the Park, but Slim's explanation tended to soothe my somewhat enraged feelings.

Larry Matthews was the champion jokester of the Park for years at Norris and the Upper Basin.

"Larry" was a constant source of wonderful stories, a well of information.



THE TETONS AND JACKSON LAKE.

Larry told me that the night Bob Ingersoll died, every geyser in the Park went into most violent eruption.

I heard a grouchy old fellow complain to Larry one day about the turkey they had for lunch, and in accents wild asked Larry where they came from. Larry whispered as low as the "groucher" had talked loud, "They came over in the Mayflower and walked here."

Larry had amiability and wit combined. He could all in the same moment tell you a funny story and turn on a geyser.

There are laughing waters, many, but not a hint of romantic story, not a Minnehaha anywhere.

Administration

The Yellowstone Park is under the exclusive control of the Secretary of the Interior, and he is administrator-in-chief of all Park affairs. All innovations, changes, or improvements must carry his approval; beyond his decision there is no appeal except by Act of Congress, signed by the President of the United States.

The following Act of Dedication was passed by Congress, February 27, 1872, and signed by the President, March 1st of that year:

THE ACT OF DEDICATION.

An Act to set apart a certain tract of land lying near the headwaters of the Yellowstone Park as a public Park.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the tract of land in the Territories of Montana and Wyoming, lying near the headwaters of the Yellowstone River and described as follows, to-wit: Commencing at the junction of Gardiner's River with the Yellowstone River and running east to the meridian, passing ten miles to the eastward of the most eastern point of Yellowstone Lake; thence south along the said meridian to the parallel of latitude, passing ten miles south of the most southern point of Yellowstone Lake; thence west along said parallel to the meridian, passing fifteen miles west of the most western point of Madison Lake; thence north along said meridian to the latitude of the junction of the Yellowstone and Gardiner's rivers; thence east to the place of beginning is hereby reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States and dedicated and set apart as a public park or pleasuring ground for the benefit and enjoyment of the people; and all persons who shall locate, or settle upon, or occupy the same or any part thereof, except as hereinafter provided, shall be considered trespassers and removed therefrom.

Section 2. That said public park shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be, as soon as practicable, to make and publish such rules and regulations as he may deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities or wonders within said park, and their retention in their natural condition.

The Secretary may, in his discretion, grant leases for building purposes, for terms not exceeding ten years, of small parcels of ground, at such places in said park as shall require the erection of buildings for the accommodation of visitors; all of the proceeds of said leases and all other revenue that may be derived from any source connected with said park, to be expended under his direction in the management of the same and the construction of roads and bridle-paths, and shall provide against the wanton destruction of the fish and game found within said park and against their capture or destruction for the purpose of merchandise or profit. He shall also cause all persons trespassing upon the same after the passage of this act to be removed therefrom, and generally shall be authorized to take all such measures as shall be

necessary or proper to fully carry out the objects and purposes of this act.
Approved March 1, 1872.

Signed by:

James G. Blaine, Speaker of the House.

Schuyler Colfax, Vice-President of the United States and President
of the Senate.

Ulysses S. Grant, President of the United States.



THE LAST OF THEIR RACE.

While the general administration of the Park is civilian, the details and direct rule are in the hands of the Military Officer with a staff and a command of two or more troops of cavalry. Although the Secretary of the Interior has absolute control of the Park, as a Park, through the Superintendent and his staff, it must not be inferred that he or the Government through any other officer has anything whatever to do with the hotels, camping and transportation companies, boats, etc., nor with their management in any way except to establish the maximum prices and to see that the agreement on leases is carried out, good order preserved, and that the following Rules and Regulations are obeyed by transient traveler and lease holder:

RULES AND REGULATIONS OF THE YELLOWSTONE NATIONAL PARK.

DEPARTMENT OF THE INTERIOR, WASHINGTON, D. C.

The following rules and regulations for the government of the Yellowstone National Park are hereby established and made public, pursuant to authority



TOWER FALLS.

conferred by Section 2475, Revised Statutes, United States, and the act of Congress approved May 7, 1894:

1. It is forbidden to remove or injure the sediments or incrustations around the geysers, hot springs, or steam vents; or to deface the same by written inscription or otherwise; or to throw any substance into the springs or geyser vents; or to injure or disturb, in any manner, or to carry off any of the mineral deposits, specimens, natural curiosities, or wonders within the park.

2. It is forbidden to ride or drive upon any of the geyser or hot-spring formations, or to turn stock loose to graze in their vicinity.

3. It is forbidden to cut or injure any growing timber. Camping parties will be allowed to use dead or fallen timber for fuel. When felling timber for fuel or for building purposes when duly authorized, stumps must not be left higher than 12 inches from the ground.

4. Fires shall be lighted only when necessary, and completely extinguished when not longer required. The

utmost care must be exercised at all times to avoid setting fire to the timber and grass.

5. Hunting or killing, wounding or capturing any bird or wild animal, except dangerous animals when necessary to prevent them from destroying life or inflicting an injury, is prohibited. The outfits, including guns, traps, teams, horses, or means of transportation used by persons engaged in hunting, killing, trapping, ensnaring, or capturing such birds or wild animals, or in possession of game killed in the park under other circumstances than prescribed above, will be forfeited to the United States, except in cases where it is shown by satisfactory evidence that the outfit is not the property of the person or persons violating this regulation, and the actual owner thereof was not a party to such violation. Firearms will only be permitted in the park on written permission from the Superintendent thereof. On arrival at the first station of the park guard, parties having firearms, traps, nets, seines, or explosives will turn them over to the sergeant in charge of the station, taking his receipt for them. They will be returned to the owners on leaving the park.

6. Fishing with nets, seines, traps, or by the use of drugs or explosives, or in any other way than with hook and line, is prohibited. Fishing for purposes of merchandise or profit is forbidden. Fishing may be prohibited by order of the Superintendent of the park in any of the waters of the park or limited therein to any specified season of the year, until otherwise ordered by the Secretary of the Interior.

7. No person will be permitted to reside permanently or to engage in any business in the park without permission, in writing, from the Department of the Interior. The Superintendent may grant authority to competent persons to act as guides and revoke the same in his discretion, and no pack trains shall be allowed in the park unless in charge of a duly registered guide.

8. The herding or grazing of loose stock or cattle of any kind within the park, as well as the driving of such stock or cattle over the roads of the park, is strictly forbidden, except in such cases where authority therefor is granted by the Secretary of the Interior. It is forbidden to cut hay within the bound-



PETRIFIED TREE.

aries of the park, excepting for the use of the wild game, and such other purposes as may be authorized by the Secretary of the Interior or the Park Superintendent.

9. No drinking saloon or barroom will be permitted within the limits of the park.

10. Private notices or advertisements shall not be posted or displayed within the park, except such as may be necessary for the convenience and guidance of the public, upon buildings on leased ground.

11. Persons who render themselves obnoxious by disorderly conduct or bad behavior, or who violate any of the foregoing rules, will be summarily removed from the park, and will not be allowed to return without permission, in writing, from the Secretary of the Interior or the Superintendent of the park.

12. It is forbidden to carve or write names or other things on any of the mileposts or signboards, or any of the platforms, seats, railings, steps, or any structures or any tree in the park.

Any person who violates any of the foregoing regulations will be deemed guilty of a misdemeanor, and be subjected to a fine as provided by the act of Congress approved May 7, 1894, "to protect the birds and animals in Yellowstone National Park and to punish crimes in said park, and for other purposes," of not more than one thousand dollars, or imprisonment not exceeding two years, or both, and be adjudged to pay all costs of the proceedings.

SIGNED BY THE SECRETARY OF THE INTERIOR.

THE FIRST FIRE.

INSTRUCTIONS TO BE OBSERVED BY ALL PERSONS IN THE PARK.

(1) The feeding, interference with, or molestation of any bear or other wild animal in the park in any way by any person not authorized by the Superintendent is prohibited.

(2) FIRES.—The greatest care must be exercised to insure the complete extinction of all camp fires before they are abandoned. All ashes and unburned bits of wood must, when practicable, be thoroughly soaked with water. Where fires are built in the neighborhood of decayed logs, particular attention must be directed to the extinguishment of fires in the decaying mold. Fire may be extinguished where water is not available by a complete covering of earth, well packed down. Care should be taken that no lighted match, cigar, or cigarette is dropped in any grass, twigs, leaves, or tree mold.

(3) CAMPS.—No camp will be made at a less distance than 100 feet from any traveled road. Blankets, clothing, hammocks, or any other article liable to frighten teams must not be hung at a nearer distance than this to the road. The same rule applies to temporary stops, such as for feeding horses or for taking luncheon.

Many successive parties camp on the same sites during the season, and camp grounds must be thoroughly cleaned before they are abandoned. Tin cans must be flattened and, with bottles, cast-off clothing, and all other debris, must be deposited in a pit provided for the purpose. When camps

are made in unusual places where pits may not be provided, all refuse must be hidden where it will not be offensive to the eye.

(4) BICYCLES.—The greatest care must be exercised by persons using bicycles. On meeting a team, the rider must stop and stand at side of road between the bicycle and the team—the outer side of the road if on a grade or curve. In passing a team from the rear, the rider should learn from the driver if his horses are liable to frighten, in which case the driver should halt and the rider dismount and walk past, keeping between the bicycle and the team.

(5) FISHING.—All fish less than 6 inches in length should at once be returned to the water with the least damage possible to the fish. No one person shall catch more than twenty-five fish in one day.

(6) DOGS.—Dogs and cats are not permitted in the park.

(7) GRAZING ANIMALS.—Only animals actually in use for purposes of transportation through the park may be grazed in the vicinity of the camps. They will not be allowed to run over any of the formations, nor near to any of the



ON TOWER CREEK.

geysers or hot springs; neither will they be allowed to run loose within 100 feet of the roads.

(8) HOTELS.—All tourists traveling with the authorized transportation companies, whether holding hotel coupons or paying cash, are allowed the privilege of extending their visit in the park at any of the hotels without extra charge for transportation. However, twenty-four hours' notice must be given to the managers of the transportation companies for reservations in other coaches.

(9) BOAT TRIP ON YELLOWSTONE LAKE.—The excursion boat on Yellowstone Lake plying between the Lake Hotel and the Thumb Lunch Station at the West Bay is not a part of the regular transportation of the park, and an extra charge is made by the boat company for this service.

(10) DRIVING ON ROADS OF PARK. —(a) Drivers of vehicles of any description, when overtaken by other vehicles traveling at a faster rate of speed, shall, if requested to do so, turn out and give the latter free and unobstructed passageway.

(b) Vehicles, in passing each other, must give full half of the roadway. This applies to freight outfits as well as any other.

(c) Racing on the park roads is strictly prohibited.

(d) Freight, baggage, and heavy camping outfits on sidehill grades throughout the park will take the outer side of the road while being passed by passenger vehicles in either direction.

(e) In making a temporary halt on the road for any purpose, excepting for lunch or camp, all teams and vehicles will be pulled to one side of the road far enough to leave a free and unobstructed passageway.

(f) In rounding sharp curves on the roads, like that in the Golden Gate Canyon, where the view ahead is completely cut off, drivers will slow down to a walk. Traveling at night is prohibited except in cases of emergency.

(g) Transportation companies, freight and wood contractors, and all other parties and persons using the park roads will be held liable for violation of these instructions.

(h) Pack trains will be required to follow trails whenever practicable. During the tourist season, when traveling on the road and vehicles carrying passengers are met, the pack train must move off the road not less than 100 feet and await the passage of the vehicle.

(i) During the tourist season pack animals, loose animals, or saddle horses, except those ridden by duly authorized persons on patrol or other public duties, are not permitted on the coach road between Gardiner and Fort Yellowstone.

(k) Riding at a gait faster than a slow trot on the plateaus near the hotels where tourists and other persons are accustomed to walk is prohibited.

(l) Mounted men on meeting a passenger team on a grade will halt on the outer side until the team passes. When approaching a passenger team from the rear, warning must be given and no faster gait will be taken than is necessary to make the passage, and if on a grade the passage will be on the outer side. A passenger team must not be passed on a dangerous grade.

(m) All wagons used in hauling heavy freight over the park roads must have tires not less than 4 inches in width. This order does not apply to express freight hauled in light spring wagons with single teams.

(11) MISCELLANEOUS.—Automobiles are not permitted in the park.

Persons are not allowed to bathe near any of the regularly traveled roads in the park without suitable bathing clothes.

All complaints by tourists and others as to service, etc., rendered in the

reservation should be made to the Superintendent in writing before the complainant leaves the park.

(12) The penalty for disregard of these instructions is summary ejection from the park.

Information relative to side trips in the park and the cost thereof can be procured from those authorized to transport passengers through or to provide for camping parties in the park, also at the office of the Superintendent.

SIGNED BY THE SUPERINTENDENT.

The Superintendent makes his headquarters at Fort Yellowstone on the plaza at Mammoth Hot Springs. Besides the troops stationed at headquarters, there is a detail of men located at Norris, West Gate, Lower Basin, Upper



OFF DUTY.

Basin, Thumb Bay, Lake, Cañon, Tower Falls and other stations not on the circuit road.

The road is patrolled twice daily by the soldiers from these stations.

REGISTERING—All persons entering the Park, except those traveling by the authorized stages, are required to register at the point of entry and must repeat the process at each interior station. Firearms must be deposited, or if allowed to be carried must be sealed and a permit issued. Dogs are not allowed in the Park.

Soldiers are on guard at the various basins, formations, etc. A judicial officer in the character of a United States Commissioner appointed by the United States Circuit Court for the District of Wyoming, residing permanently in the Park, has authority to arrest and hand over to the proper court any offender against the rules and regulations of the Park. The Commissioner is assisted by deputies. The courtroom and jail are at Mammoth Hot Springs.

Flowers and Forests

FLOWERS—Flowers! There are flowers everywhere. From alongside the rails at Yellowstone and Gardiner, and the borders of the roads and trails to the summit of Mount Washburn there are flowers, and more at the brook side and in the cañons, where they bloom in every hue and color; but on Mount Washburn, one traveler avers they are only Red, White and Blue.

They are a joy forever; these things of beauty in the Park. The first sunny days after the winter clouds have rolled by, bring them out even to the very edge of the snowdrifts, and even under it the hardy little arbutus hides its tiny blossoms. Then, as the warmer sunshine of spring and summer days falls on the meadows and filters through the forests, the flowers bloom in rich profusion everywhere.

There are some people who are extremely partial to the word "but" and who carry a supply of "buts" along with their stock of "so far," and are always ready for its instant use; it was one of these that said of the Park flowers, "BUT they have no fragrance." Indeed they do have fragrance, and whatever flower lacks in perfume more than makes up in its rare, wild beauty and with its more fragrant neighbors makes the places where it grows one vast bouquet of exquisite beauty and sweet-smelling odors in a garden that is Nature's very own.

"The flowers that bloom in the Spring, tra la," are in the Park all summer; those that come first in the valleys and cañons depths are in bloom in the higher altitudes later on, so that there is never a lack of flowers at any time.

You can't describe a flower anyway, hence the task will not be attempted here, nor can all the flowers in the Park be enumerated in this space.

The range is from the wild rose to the lilies of the valley, and the list is a long one: Violets, Primrose, Pyrola, Monkey-face, Adder's Tooth, Orchid, Anemone, Marsh Marigold, Jacob's Ladder, Golden-rod, Cowslip, Sunflower, Water Lily, Aster, Wild Geranium, Fireweed, Beard Tongue, Harebell, Immortelles, Umbrella Plant, Gentian, Columbine, Forget-me-not, Indian Pick, Paint Brush, Indian Paint Brush, Monk's Hood, Lupine, Larkspur, Wolfsbane, Phlox, Lungwort, Bitter-root (the state flower of Montana), Daffodils, Night-blooming Thistle, Buttercup, and there are ferns and mistletoe and mosses in endless variety, and a hundred flowers that I cannot remember now, enough to make the Park a flower garden as well.

These flowers droop when gathered in the hand, but quickly revive when placed in water. The tables in every dining-room in the hotels are tastefully decorated every day.

One of the chief beauties of the Yellowstone Park is the grasses that carpet the meadows and softly mat the forests, pleasing to look upon and useful for the grazing of deer and elk and the animals of the passersby; for this latter purpose we may mention the grama, bunch and buffalo grasses. There is also wild timothy and clover, all of which grow in profusion without cultivation.

The prickly pear and other smaller varieties of the cactus exist and beautifully blossom. Red raspberries, wild gooseberry and currants grow in the Park, and the wild strawberry plant but not the fruit.

FORESTS—The Yellowstone Park is one vast forest, dotted here and there with grassy meadows which were, perhaps a long time ago, also covered with trees that were since destroyed by the forest fires before there were any caretakers to prevent them.

The great trees of these fine forests greatly add to the charm of the drive, especially in Christmas Tree Park, and from Old Faithful to the Lake where it is up hill and down dale all the way, with only a little green meadow now and then—a little green meadow just big enough for a cottage lawn. And there's a window in the trees of the Great Divide where the stages stop long enough for you to look out on one of the grandest pictures in the world—the foreground of the grand old forests seen from far above their tops, Shoshone Lake shimmering in the middle distance, and far beyond the lake the Tetons, blue in the distance so that it is hard to tell sometimes where the blue of the mountain ends and the sky begins.

More than two-thirds of the Park is covered by trees in size ranging from



SPARRING FOR TIME.

the mast of a yawl boat to the largest bridge timber. There is little commercial value to this timber; it is, in fact, more ornamental than useful, except where it is used for firewood after it has fallen, telegraph poles, corrals, etc.

White pine grows only in the lower elevations, and is about the only one of the pine variety in the Park. The Douglas Spruce is found in almost all parts and grows to a greater size than any other tree, and is consequently more in use for building purposes.

The only cedars are the knarled and knotted little half vine and half trees one sees around Mammoth Hot Springs and in the Gardiner Valley, with no other use than to add quaintness to the beauties of the Park forests.

The Silver Fir is the most shapely and with the Engelmann Spruce makes up much of the forest beauty. The boughs of these firs commencing a foot or two from the ground incline, like a tent roof, from the trunk and provide almost complete protection from rain or snow. There are thousands and thousands of these beautiful trees, enough to supply Santa Claus' most exorbitant demands throughout all his domain at Christmas time. The weight of snow causes the depressed boughs; as the twig is bent downward, so grows the bough. The darker green of the foliage and the red brown of the bark contrast in beauty.

Poplar, Aspen and Willow grow more in the open and the latter along the streams in the meadows. The Aspen leaves are a favorite on the menu of



FOREST AND FLOWERS.

the elk and the deer. Alder grows also along the brookside and maple is found in the lower altitudes.

There is much fallen timber all through the Park, trees that have been burnt down, blown down or crowded down till it is next to impossible to travel through the forests. Fallen timber only may be used for fuel.

The preservation of the forests is one of the chief duties of the Park's custodians; not a tree may be felled without special permission from the authorities. "Extinguish your Fires" is the legend that stares campers in the face everywhere, as one of the precautions against forest fires, and as a consequence they are of rare occurrence.

The Drive

THE DRIVE around the Circuit Road of the Yellowstone Park has not its equal on earth—a coaching trip that is talked about all around the world, wherever civilized language is spoken.

Nature laid out the way that was the easiest to travel, but it took civilized man more than fifty years, after they knew of the wonders and beauties within, to find that way where beauty grew upon beauty and wonder added to wonder, as it does on the way that is the established road of today.

The old time explorers went within five miles of the great Terraces at Mammoth and knew nothing of their existence; others were within a mile of the Great Fountain Geyser and did not stop; still another was very near Old Faithful, six miles, and turned his back on **THE WONDER OF THE WORLD**, and not one of any of them for half a century knew of the easiest and best way, the way of the "Skillet Road," where little geysers come first, then grow larger as you go on, and larger till the Giant and grand Old Faithful, and the pools take on new and more varied colors as you journey on along this way that Nature made and that took so long to find; the hills grow to higher hills till they are mighty mountains, the valleys deepen to yawning cañons, and little cascades here ripple down the rocks till they are foaming cataracts there, as you go on this way up the Park.

Really it is a case of saving the best for the last. When you see the little steam jets along the Gardiner River you are interested; then further on when a little four-by-nine spouter fizzles by the roadside you wonder, and while you wonder you come to the bigger ones, and to those that throw their burning waters sky high. Many a traveler has looked upon the Terraces and said: "I'll go back, now, am satisfied; I've had my money's worth," but he went on up the Park.

THE ARRIVAL AT GARDINER is with the spirits keyed up to the highest note of expectancy; the train from Livingston has come down through Yankee Jim Cañon and Paradise Valley, without stopping at the old terminal at Cinnabar, turns about among some hills, then rounds the curve to the most unique railway station you ever saw, built as an exaggerated cabin, of unhewn, unbarked logs, in Old Faithful style of architecture, as you will say when you have seen Old Faithful.

The Pullman porters who have been "dus'sin off" for an hour have placed all the hand baggage on the platform and opened the vestibuled doors on the right-hand side. Naturally you look out on that side; there is the Arched Gate, and circled round the little lake are the great big tally-hos with their six-horse teams, the stages with their "fours," the surreys with their "twos," of splendid horses stamping in restless impatience to be going. The tally-hos, stages, surreys come rounding up to the station platform in double-quick, everybody clambers aboard, some on top, some inside, baggage is thrown into the boot and they're off in a bunch. Is there another scene in the world just like this?

Where?

FROM GARDINER TO MAMMOTH

It is five miles. Passing up from the station to and under the Arch into the Yellowstone Park, the coaches roll out onto an open plateau of green fields where there are herds of antelope. On the left is the town of Gardiner, a sort

of one-sided town, as all its houses are on the same side of its one street; the street is on the Park line and buildings are not permitted inside the line, but there's hardly enough of Gardiner to go on both sides of a street anyway.

Electric Peak and Sepulcher Mountain are on the right, lifting their heights high 'gainst the western sky. In a few minutes the stages have crossed the little fields, passed along their irrigating sluices and entered the Gardiner Cañon.

The road runs along the Gardiner River, close to its rushing waters, and crossing it four times within a mile. You are just getting glimpses of the scenic beauties you have heard of; on the east side of the river the cliffs are hundreds of feet high, in crags and pinnacles; on one of the highest is an eagle's nest that has been occupied every year since the Park was known. It is said that the eagle is the only bird that uses an old nest, but it is not



GOING UP MOUNT WASHBURN.

sure that the same pair use the same nest every year; they may move, May 1st, same as--well, the eagles are always there with their little ones.

There are few level places and the stages move slowly; the horses walk along with a steady climb all the time. After passing the 3-mile post look to the left; down near the Gardiner and emptying into it is the **BOILING RIVER**; you can locate it from the rising steam. This Boiling River is fed by underground streams of hot water from the Mammoth Hot Springs on the Terraces. The flat top mountain on the left is Mount Everts. For the last mile to Mammoth the road rises nearly six hundred feet, along the hillside, and in the open till nearly to the top where it enters a little patch of timber, then as a sharp turn is made to the north there is a glimpse of the great Terraces on the left. On the right is Fort Yellowstone, officers' quarters, the barracks, and the barns, on the left again the Terraces, the village and just ahead Mammoth Hot Springs Hotel. The horses are in a trot along the smooth

macadam, and with a graceful turn around a well-kept lawn they draw up quickly at the veranda platform and the first little journey ends at hospitable doors. Now there must be a few minutes of business in presenting railroad tickets at the transportation office in the lobby, then to the hotel clerk, and you may have the afternoon for a walk or a ride to the Formation, the Terraces and the Hot Springs, as stages for up the Park do not start till eight the next morning.

From the veranda the view is a beautiful one; directly in front is Capitol Hill, on its summit the headquarters house built by Superintendent Norris in 1879. The high cliffs to the left are on Mount Everts. The Terraces are on the right, and in the background, looking between Capitol Hill and the Terraces, is Bunsen Peak. In the foreground asphalt walks lead across the lawn to the military quarters and the residences of the Park officials; to the



SUMMIT, MOUNT WASHBURN.

eastward are the buildings of the Weather Bureau, the Commissary Department and the Barns. The west walk leads towards the Terraces, by the store and post-office, the Cottage Hotel, the curio shops and residences of other Park people, and at the end of the walk, close to the Formation at the foot of the gulch, is the house that Jim McCartney built, the first house of the Park and dignified by the title of the first hotel, for Jim "took in boarders."

After luncheon at the hotel the head porter announces guides ready for the "Formation." The Formation means that sandy waste around the hot springs and geysers. You may ride or walk; if you ride, the driver is your guide. I may say here that none of these rides to formations and other attractions in the Park are included in the transportation ticket. The guide accompanying those who walk is dependent on the fees he may receive for his services, as no specific charge is made.

Perhaps the easiest way to see all is to ride up and walk down, as those who



CHIMNEY ROCK, CODY ROAD.

ride both ways cannot see the beautiful Terraces on the west and north sides.

The route of the Formation wagon is over the main road as it starts up the Park, passing in front of "Jupiter," the greatest of all terraces, and reaching the upper level of the Formation the wagon stops for your inspection of Mammoth Hot Springs and the Terrace.

The constantly flowing waters, steaming hot, ripple down the Terrace side, spread out in thin sheets, impregnated so strongly that the deposit leaves the Terrace walls in the most delicately tinted hues. The waters of the hot springs are clear as crystal, yet the depths give out the most exquisite creams, browns and greens. In one of the smaller, shallow springs articles of iron or brass, as candlesticks, horseshoes, inkstands, etc., are placed in the water that within twenty-four to thirty-six hours covers them with a thick coating of sparkling crystals; these are offered as souvenirs in the little stores below.

While the wagon party are here by the springs, the others who have walked are coming over the

north brink; they came up the paved walk to Liberty Cap, then went in on the Formation to the Devil's Thumb, Minerva, Cleopatra and Pulpit Terraces.

LIBERTY CAP is well named and will not need to be pointed out, a grayish white cone near the roadway, about forty feet high by twenty in diameter; it is an extinct crater.

DEVIL'S THUMB is near the steep incline of the Formation just west of Liberty Cap and very much like it in every way; also the remains of an old-time geyser.

MINERVA TERRACE is on the north side of the Formation near the forest. Minerva varies in her moods of color, and sometimes is devoid of it altogether. The colors depend upon the springs from which the water comes and flows over the Terrace, and if for a time there is little or no water there is no color, just the ashen white or gray.

PULPIT TERRACE is nearer the upper level of the Formation, and it may be said to be a part of Jupiter, but its build is entirely different. The ever flowing hot waters have formed shallow bowls, which are always full to overflowing; the water trickles down and forms the most beautifully colored stalactites, all from water that is absolutely colorless, yet the stalactites are in gold, cream, brown.

CLEOPATRA is near by the trees that fringe the western slope; her brilliant colors are in pleasing contrast with the green of the forest firs.

All these require the walk of a mile in and out among the springs, bowls and basins, as it is an inexorable rule, no horses allowed on the Formation.

JUPITER TERRACE is the crowning feature, facing the entire east side of the great Formation that is more than three hundred feet above the level of the plaza in front of the hotel. Its grand beauties may be seen from the passing stages, and here it is that the enthusiastic traveler said, "Am satisfied. I have value received right now," and he hadn't begun to see things yet.

The view from the top of the Terrace Formation is superb, not surpassed by any in the Park, and is entirely different from any other; the hotel, the



ELEANOR CASCADE, CODY ROAD.

military buildings, the village and the lower Terraces are far down beneath your viewpoint, to the northeast is the North Gate at Gardiner, and in the sweep of vision commencing at the northwest are in the order, Electric Peak, Mount Everts, Bunsen Peak, and far to the east the Absaroka Range.

In the forest back of the hot springs are some small terraces, as Angel Terrace, Orange Geyser, the White Elephant, Narrow Gauge, formations of more or less beauty as according to the amount of water flowing. The Orange is so called from its shape and color.

BATH LAKE, CUPID'S CAVE, DEVIL'S KITCHEN and STYGIAN CAVE complete the list. The last named should not be entered on account of the noxious gases as evidenced by the large numbers of dead birds found every spring. In **McCARTNEY'S CAVE** an elk's carcass was found; the elk had evidently crushed through the soft snow into the cave, his antlers had caught on the sides of the entrance, and he hanged himself.

The walk to the top of **CAPITOL HILL**, worth while only for the view, which is not as fine as from the Terrace. Colonel Norris' castle, which the Nez Percé and Bannock Indians scared him into building in 1879, has only that matter of interest.

All this will fill an afternoon at Mammoth, and you will have a twelve-mile drive left over for another day—the drive around **BUNSEN PEAK**, through the **MIDDLE GARDINER CAÑON** to **OSPREY FALLS** and **SHEEPEATER CLIFFS**. This cañon has walls over five hundred feet high and is second only to the Grand Cañon of the Yellowstone, one of the finest drives in the Yellowstone country.

MAMMOTH HOT SPRINGS TO NORRIS GEYSER BASIN.

Eight o'clock in the morning is the usual hour for departure of the stages up the Park, and the round-up of the fine Concord coaches on the circular driveway on the lawn at the front of the hotel is a novel and interesting scene. The travelers having already been assigned to their stages, are ready. One stage at a time drives up to the platform, names of those to occupy it are called out, they are quickly on board, baggage strapped in the boot; that stage starts and another drives up, and so on till the last passenger is provided for.

It is the custom for each person to occupy for the drive the seat which he or she chooses at the start. This is not a rule, and of course amiable people may change with others if desired. The seat with the driver cannot be reserved in advance, nor any other particular seat, for that matter, and the seat with the driver should never be retained by one person for the entire drive; there should be a "change about" with all on board if desired. It is the rule of the road for stages to retain the position in the line that they start out with; drivers are not allowed to pass the stage ahead without special permission from the Superintendent.

It is twenty miles from Mammoth to Norris; the mileposts of this section are lettered M H and N B for Mammoth Hotel and Norris Basin. The figures under the initials give the distance to the point approached. Altitudes are given in the figures below. In referring to distances we will not use the words "mileposts" or "mile." Thus we will not say that "Golden Gate is near the 4-mile post," but Golden Gate is near 4+16, which means it is four miles from Mammoth and sixteen from Norris.

The stages leave the platform, circle around in the lawn, pass the west end of the hotel, the postoffice, the stores, the village, and Liberty Cap, and commence the climb of the road between Capitol Hill and the Terraces.

The road passes along the base of great Jupiter Terrace, and with the morn-

ing sun on its varied colors they are very beautiful. It is a winding road with easy grades, smooth as a street. The views are fine, Mammoth Hot Springs on the north, Mount Everts to the east, and far away the Absaroka, just ahead Bunsen, in the valley below on the left the old buffalo corral, the road to Tower Falls, and the old road to Norris.

THE SILVER GATE is right in the midst of the "**HOODOOS**," an indescribable jumble of travertine rocks commencing about 18+2 and continuing to 17+3. The Silver Gate is an abrupt turn between the mammoth masses of solid stone, and just west a few hundred feet is the **GARGOYLE**, a dozen feet from the road on the east side. This gargoyle is not charted on any



CIRCULAR BRIDGE, SYLVAN PASS, CODY ROAD.

map, nor has its name ever had a place in Park literature, but the gargoyle is there. Golden Gate is famous, and has the attention of every writer and photographer. There are posted at every point of interest in the Park tablets or signs giving the name of the attraction, and the Hoodoos are among many that do not need any signs or tablets; they are apparently "hoodoos" at first glance, the ragged rocks from ten to fifty feet high and a hundred in diameter cover the side of the mountain for many acres; they are in all fantastic shapes. The best view is from the stages coming in, that is, from the Park. These must not be confused with the real Hoodoos near the eastern boundary of

the Park near the source of Miller Creek, but they are more accessible and will answer the hoodoo purpose to the average traveler.

GOLDEN GATE, 16+4, is really the cañon between Terrace Mountain and Bunsen Peak, through which Glen Creek flows after tumbling over Rustic Falls, at the west end of the cañon. The road runs high on the cliffs of Terrace Mountain, passing over a splendid concrete-arched viaduct, the only one of the kind in the world. At the east entrance of the cañon, just at the end of the viaduct, is the large stone pillar that is shown in all photographs of the Golden Gate. It is said that this pillar was moved four feet and the cañon walls blasted to make room for the steamboat Zillah when it was moved from the railroad to Lake Yellowstone. After passing the pillar the road on the viaduct makes a graceful curve against the north side of the cañon, the towering cliffs on the one side and the deep cañon on the other, and high on the mountain-side is a fez-shaped rock yet unnamed. The Golden Gate is best seen from the incoming stages.

Verily, Golden Gate is beautiful at its entering and at its departure at the brink of Rustic Falls; then without any hint of what is to come, the stage rolls out into the open, and the horses that have walked all morning quicken to a brisk trot over a level road leading straight away through the meadows. At 15+5, on the right, Swan Lake is near the water supply of Mammoth Hot Springs, so called on account of the entire absence of swans. All around the mountain meadow the foothills are that rise to snow-capped peaks, where there is snow all summer long. At the north is Electric Peak, then in the range southward, Quadrant Mountain, Bannock Peak, Huntley, Holmes and White westward of the road. We passed Bunsen Peak and Terrace Mountain when we left the Golden Gate, but take a good look at old Bunsen, for it's a landmark that can be seen for many miles around, and when you are coming from up the Park you can tell when you are nearing your journey's end.

All the creeks along here are tributary to the Gardiner River, which in turn flows into the Yellowstone—Indian, Panther and Willow creeks, that are crossed and recrossed in Swan Lake Basin and Willow Park. Wylie's Permanent Camp, the first from Gardiner, is near 14+6. Along the right of the road Willow Creek, from 12+8 to 11+9, has been turned into half a dozen channels by beaver dams.

APOLLINARIS SPRING, 10+10, a spring whose waters have the taste of apollinaris from a bottle not freshly opened; the water is cool and not unpleasant. It is advised to taste only of these wayside springs; not that they are harmful, but too many kinds of water are not to be desired. There is a platform at Apollinaris Spring; all stages stop. Here and at other places along the drive are cabins in the woods for public comfort, for men and women.

OBSIDIAN CLIFF, 8+12, is one of the curiosities of the Park, a mountain of volcanic glass, black as jet and harder than any rock; so hard that it resisted the drills of the road-builders and the space for the road was broken away by heating the obsidian to a very high temperature by fire, then throwing cold water on it. Cold water has been thrown on this story, but the facts as stated are true. Colonel Norris was responsible for this novel method of getting the cliff out of his roadway. The débris is in the ballast of the road for a mile each way. Obsidian Cliff is on the east side of the road, opposite is the outlet of Beaver Lake, which lake with its dams, made by wise little workers, is only half a mile south; this is the beaver lake that "Slim," the driver, told me came near being depopulated by taking out so many beavers for the theological garden at Washington. The dam is nearly half a mile long.

When you come along about 6+14 you will see on the right a lovely little brooklet winding in and out in the shadow of the trees. The waters are full of

thick, long grass, a bright green grass a yard long, carried on the surface of the water; just at the edge of the road it flows so swiftly that the grass waves from side to side. "There," said a girl, "there's Maiden's Hair Brook!" but on the map it is Obsidian Creek.

ROARING MOUNTAIN, 5+15, is a high hill on the east side of the road; the summit, half mile away, has a great steam vent that produces the roaring sound which gives its name. A violent eruption in 1902 created numerous fissures from which steam issued in such quantities as to kill all the trees on the hillside.

TWIN LAKES, 4+16, are among the Park's most exquisite beauties, that under a turquoise sky of a sunny day reflect the azure tints till it seems a piece of sky has been dropped down there for us to have a nearer view. There are similar colorings in the hot pools, but here in Twin Lakes the water is cold. Hence the heat or cold has nothing to do with the colors in these clear water pools and lakes.

FRYING PAN, 2+18; on the right of the road and near to it is a frying, sputtering little basin that is properly described in its name. Since passing Beaver Lake we have seen hot springs almost spouting to miniature geysers; from this and the smell we conclude that we are near Norris Basin where the first real geysers are. After 1+19 the Patrol Cabin is on the left of the road; we cross the headwaters of the Gibbon River, pass the fork of the Circuit Road that leads to the Cañon, and in another minute the stage rolls up to the Lunch Station at

NORRIS GEYSER BASIN.

The attractions at Norris are divided between the incomparable lunch station and the geysers, with the odds in favor of the lunch; the American appetite, always good, is keenly whetted after the twenty-mile ride. The geyser basin is at the front door and the lunch just inside; the crowd is also inside, the geysers can wait. The custom is to leave baggage, wraps, etc., in the stage as neither will be needed during the hour-and-a-half stop. The lunch, or dinner, rather, is a genuine surprise to every one who sits at the snowy tables, although the fame of it has gone abroad through those who have told about the bountiful feed of good things, and "the gingerbread."

After luncheon there's time for the walk across the Basin and to the geysers and pools beyond; a board walk affords a safe passage across the Basin. The walk is in the direction in which you are traveling, so there is no need to come back to the station to take the stage; you will follow the guide and after you have seen all, wait at the rest-shed till the stages come up, which they will do as soon as the horses have finished feeding.

Those who prefer may remain at the Station until the stages come up, then, as the road runs near the side of the Basin, may have a view of the geysers.

The geysers of Norris are interesting, and by all newcomers are regarded as truly wonderful, as they are in their small way. As we have said, things



WEDDED TREES.

grow better and better on this road up the Park, and these little geysers of Norris are only a hint of what is to come farther on.

THE CONGRESS is a boiling spring most of the time, with an occasional geyser action. The steam vent disappeared in 1893 and the Congress commenced a violent boiling of its blue waters.

CONSTANT is a lively little geyser near the board walk about the middle of the Formation. One man said, "It plays minutely," with the accent on "min," and we may add minutely with the accent on the "u;" both are correct. Congress plays every minute or two, but with an eruption of only twenty-five to thirty feet.

BLACK GROWLER was until 1907 a steam vent of great force, the vapor escaping with a roar that could be heard a mile away. Suddenly one day the force of steam was greatly diminished and a black water geyser appeared at its side, so the name need not be changed.

HURRICANE is near by and has a similar action.

NEW CRATER is on the east side of the road with minor eruptions at frequent intervals.

EMERALD POOL is a very pretty one worthy of the name, but not to be compared to the Emerald Pool at the Upper Basin.

MONARCH, like all monarchs, is extremely uncertain in its action, but when it does break forth, it is a monarch indeed. Its two craters are under the colored rocks of the hillside just east of the rest station, really not in the Norris Basin. The Monarch's former schedule was every twelve hours, throwing water a hundred feet or more; now it is very irregular, but playing with its old-time vigor when it is in action.

MINUTE MAN is within a few feet of the rest station, and does not always live up to its name as it varies from one to twenty minutes between eruptions of twelve to fifteen feet, but you can rest on the bench and wait for it.

The other geysers of Norris are Vixen, Fearless, Fissure, Arsenic and Steamboat, of little importance compared with the larger ones, but it is an hour and a half of wonders, and the traveler has seen more than he could anywhere else in the world, and had the best lunch.

NORRIS GEYSER BASIN TO LOWER GEYSER BASIN.

After their rest and feed the horses are refreshed and trot away briskly on the second half of the only long drive on the Circuit Road. Starting from the hotel usually at 1:30 p. m., the stages pick up their passengers at the rest station about 1:45.

The road is through the forests for two miles, then into the open at 18+2, where it enters **ELK PARK** and comes again to the Gibbon River, and runs straight away to the forest again, but for only a short distance, and then into the **GIBBON MEADOWS**.

Half mile east of the road, at the south border of the Meadows, are the **GIBBON PAINT POTS**, of great beauty, but cannot be reached by stage travelers on the regular coaches as they cannot stop, and the walk to the Paint Pots is not an easy one.

All the white patches on the mountain-sides are not snow; they are formation from extinct geysers. High up on the side of the mountain on the west side of the river is Monument Geyser Basin, with a partially extinct geyser a thousand feet above the road; there is a trail but it is a hard one. There are towering cliffs over a thousand feet high that form the north gate of the cañon.

Leaving the Meadows the road enters the forest that extends to the Fire Hole, but the ride is a delightful one through **GIBBON CAÑON**, crossing and

recrossing the Gibbon River with much to see on both sides and in the stream. Just before 17+3 is a huge boulder, in the middle of the river, fifteen feet high and six feet in diameter, but the rushing water has worn the base away till it is not over two feet thick; it should be called Wine Glass Boulder from the stem-like base.

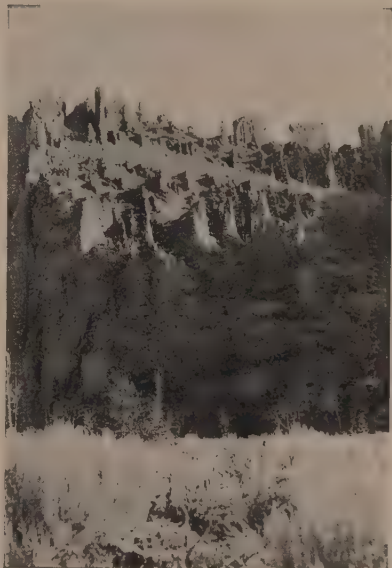
GIBBON CHOCOLATE POTS, one on the right of the road and very near it, the other on the west side of the stream, about 17+3; they are chocolate-colored cones, ten to fifteen feet high, with a constant stream of hot water issuing from the top and pouring over the sides of the cones.

There are boiling springs all along the road now, and some steam vents. The most important is **BERYL SPRING**, on the right, ten feet from the road; a violently boiling cauldron that sends its steam and waste water across the road. It is at 15+5. At 12+8 is Iron Spring, so strongly impregnated that the water has colored its sides and waste way a bright red.

GIBBON FALLS, near 12+8, is the bright particular picture of this part of the Drive; the road is now on the west side of the river and has gradually climbed up on the hillside till it is nearly a hundred feet above the top of the falls. Immediately over the cascade, and just in front of it, the stages stop a few moments for the view which is on the left side. The road here is picturesque to a degree; there are high hills on one side and the depths of the cañon on the other, with a strong stone wall between the roadway and cañon. It is a down grade now till 10+10, where the north fork of the West Gate road branches off to the right, and near by is a Wylie Camp.

Now begins a climb over the ridge that lies between the Gibbon and Fire Hole rivers, and a few minutes after leaving the bridge over the Gibbon the stage is a hundred feet above the river; looking northward there is a fine view, a landscape full of beauty. For the next four miles it is a heavy pull over a sandy road, high up on the hills where it is impossible to get water for sprinkling, but it is soon over and at 7+13 the grade turns and it's a roll down to the Fire Hole River.

At 5+15 the Circuit Road is joined by the incoming road from the West Gate; the junction is right on the banks of the Fire Hole River where there are beautiful rapids and cascades. The road follows up the east bank of the Fire Hole for three miles; the river is on the right. You can see the fish, you can see the fir trees growing on the boulders, apparently out of the solid rock. Ask your driver to show you the big tree almost cut down by beavers and the figures on the cliffs on the other side of the river; you can see for yourself the mass of broken volcanic rock that completely covers the side of hill. Here



HOLY CITY, CODY ROAD.

is one of the prettiest drives in the Park. After 3+17 look out straight ahead and you can see the Fountain Hotel.

Nez Percé Creek, 2+18, is crossed by bridge, or ford, as the driver pleases. A tablet on a tree on the left of the road tells of the capture of the Cowan family by Chief Joseph and his Nez Percé band and the pursuit by General Howard. On the south side of the creek on the left is the guardhouse and Patrol Station, on the right a summer camp of the United States cavalry, and near by the old abandoned hotel.

The road is straight away across the marsh to the hotel, the approach being from the rear. If you will keep a close lookout to the edge of the forest eastward of the road, you may see the bears coming down to their supper.

WEST GATE ROAD TO THE FOUNTAIN.

After leaving the railway station at Yellowstone, the M-Y Concord coaches have a smooth, level road through the beautiful Christmas Tree Park. The military post is about two miles from the railroad on the banks of the Madison River, just west of Madison Cañon. The West Gate is claimed to be the pioneer entrance to the Park region; commencing with the pioneers, Colter and Bridger came in by this route, then others of the long line of explorers down to the time of the Nez Percés, who also came in this way just ahead of General Howard.

MOUNT YELLOWSTONE, also called National Park Mountain, is at the junction of the Gibbon and the Fire Hole, the two rivers that form the Madison. At this point the Washburn-Langford expedition made their last camp in the Yellowstone Park in 1870, and here the first mention of the Yellowstone Park was made by Cornelius Hedges. While his fellow campers were talking of the vast possibilities of the place as a resort, from their point of view, Mr. Hedges talked National Park all the time, to which the others assented; and from this camp the Park idea went to Congress, and two years later the Act of Dedication was passed.

From the Madison one branch of the road goes to Norris; the right hand road follows the course of the Fire Hole River to its junction with the Circuit Road, five miles west of Lower Geyser Basin and the Fountain Hotel, as described on the foregoing pages.

LOWER GEYSER BASIN.

THE FOUNTAIN HOTEL is the first, and for some minutes the greatest attraction of the Lower Basin, and after the ride of the day, it is a very beautiful and a very big hotel and looks extremely good to the traveler, and it really is all of these. Its lines of beauty are not as marked as some others, but it is a beautiful haven of rest, a big modern hotel, with good rooms, an excellent dining-room, electric bells and lights, steam heat and a log fire, and the finest sulphur baths of water steaming hot, from a geyser pool. The hotel fronts south, towards the geyser basin.

It is probable that the bears will have attention early after arrival; there is always a quorum in session at the garbage dumps about sundown. Pass around the east end of the hotel, turn the corner to the left, then follow the path bearing to the right and towards the forest, and just beyond the cow barns, there the bears are. The wild bear is an attraction not to be resisted and no man ever tries to, and no woman or child wants to, so we all go to see the bears first. The bears might run away and the geysers can't.

FOUNTAIN GEYSER is on the slope of the Formation immediately in front of the hotel, four hundred yards away. Eruptions may be seen from the



LOWER GEYSER BASIN.

hotel; they occur at intervals of three to four hours, sending water from sixty to seventy feet; action is imminent when the pool and crater are full to overflowing. The Fountain is capricious; at one time it remained inactive for three months, at another it changed its crater from one pool to another, the two craters being very near each other. This geyser is the largest that the traveler over the Circuit Road has yet seen, but there are others, and they will grow larger while they last. The Fountain Geyser must not be confused with the Great Fountain, which is two miles away.

CLEPSYDRA, sometimes a spring and then a geyser; a little one but extremely active during its geyser periods. Clepsydra is a few yards west of the Fountain.

MAMMOTH PAINT POTS are just on top of the hill in front of the hotel, a few rods east of the Fountain Geyser and right on the roadside, a boiling, bubbling mass of hot mud in tints of cream, rose, pink and red, as if some giant artist had mixed his paints, set them to boil, and while he has been gone, the moisture has somewhat dried out till the mass is a thickened paste, puffing up little jets of steam till the mud has been raised to miniature pyramids, growing as the soft stuff is lifted out and forms on the sides. You must see the Paint Pots; it is impossible to describe them. Some of the material has been used on the interior walls of the Fountain Hotel.

SULPHUR SPRING is within fifty feet of the Paint Pots; its chief attraction is in the fact that it furnishes the water for the baths in the hotel, and that the water through the force of gravity reaches the bath-tubs.

GREAT FOUNTAIN GEYSER, two miles from the Fountain Hotel, one mile down the Circuit Road, and one mile east of that road; rarely seen by the average traveler, as it is in eruption at intervals of eight to ten hours, and unless the traveler hits the schedule of the geyser he can't see it; in many respects the most extraordinary geyser in the Park. The great volume of water is lifted bodily 75 to 100 feet with jets and sprays much higher. The Great Fountain Geyser will play when its crater is full to overflowing and the hot water is running down over the formation. There is a little pool about two by three feet within ten feet of the crater; when this begins to fill there is an hour in which to communicate with the hotel, if any one is on watch, and the guests will have time, if they hurry, to see one of the finest displays in the Park. Chittenden says, "In its surface (of the cone) are numerous pools, molded and ornamented in a manner quite unapproachable, at least on so large a scale, in any other part of the Park. In the center is a large, irregular pool of great depth full of hot water, forming to all appearances a lovely, quiescent spring. At times of eruption, the contents of this spring are hurled bodily upward to a height sometimes reaching a hundred feet. The torrent of water which follows the prodigious downpouring upon the face of the cone flows away in all directions over the white geyserite plain. No visitor to the Yellowstone can afford to miss the Great Fountain Geyser."

SURPRISE GEYSER is near by, half dozen rods to the south; a quiet pool unless you throw in a handful of sand or stir it up with a pole which is lying near by, and which, in this case only, seems to be permitted; then it goes into action mildly, as if the sand or the pole troubled the water to the boiling point. The nearby but uninteresting items are White Dome, Egg Shell and Buffalo Spring; in the last named was for a long time the whited skeleton of a buffalo.

FIRE HOLE LAKE, about half mile east of the Great Fountain. This lake or pool is without a parallel; it is the one thing in the Park that has no counterpart. There is just one Fire Hole Lake; there isn't even a resemblance to it.

It is a pool of clear, hot water; in its depth flames of blue fire are burning, coming from the earth below the waters and are by them unquenched.

On the north side of the pool the flames do not blaze so fiercely as on the south side. But on both sides there the blue flames are burning, burning, always burning in the depths of the dark waters.

On the south side is a small pool not over ten feet wide whose outlines remain the same all the time, in the shape of an old lady sitting, knitting.

Near by the Fire Hole is Bath Pool, and sundry small geysers always in action; their names are indicated on the adjacent tablets.

Near the Paint Pots are some prettily colored pools, and all over the basin, which covers an area of over twenty-five square miles, are hundreds of unnamed pools and geyserettes.

In the rear of the hotel is a pool which is used for scalding the hotel linen.

LOWER GEYSER BASIN TO UPPER GEYSER BASIN.

The mileposts on this section are marked U B Upper Basin, and F H Fountain Hotel. The distance is nine miles.

At the starting hour, as shown on local schedules, the stages line up in front



PAHASKA TEPEE, CODY ROAD.

of the Fountain Hotel in the same order in which they arrived, and the travelers use their same stages and seats; departure is made as the passengers are on board.

The route is south, passing the Fountain Geyser, Paint Pots, and Sulphur Springs.

EXCELSIOR GEYSER, 6+3, is in what is called Midway Basin, but is really the southern portion of the Lower Basin. The stages stop at a platform from which stairs lead down to a foot bridge across the Fire Hole River, then the stages proceed and wait on the south side of the basin, so there is no need to come back to the stairs again. Excelsior has been inactive since 1888, during which year the eruptions were so violent as to disturb other geysers in the Upper Basin, and two of the largest ceased playing during action by Excelsior. Excelsior at that time threw out an immense volume of water and great masses of rock so that the crater was greatly enlarged, and the water in the river was raised some inches, and now, though inactive, pours over 4,000 gallons of water per minute into the Fire Hole River. The

crater is 20 feet deep and has an area of 330 by 200 feet. In 1882 a jet fifty feet in diameter was thrown to the height of 250 feet. It is probable that the enlargement of the crater removed the pressure and caused the present inactivity. This was of course the largest geyser, in reality a volcano.

The waters are blue; that is, they seem to be, but they are as the proverbial crystal. Great volumes of steam constantly rising from the crater may be seen miles away.

PRISMATIC POOL is worth all this journey to see, and the man who said he was ready to go back when he had seen the Terraces at Mammoth is more than ready now, but concludes he will "go on and see the whole show," as there might be something better. The colors of this little lake are prismatic in all that word implies, changing as the angles of light change, giving out all the hues and tints; even the steam which ever hangs over the water partakes of its pretty colors. The formation around the spring gently rises to the water's edge in tiny terraces, and under the water falls away towards the deep water center of the pool. The little terraces not more than an inch high are traced in patterns like lace or ferns, in all the colors. Everybody has a fine word for Prismatic Lake, even the man who scrawls his name on the formation with the point of his umbrella; he can put it here while the guard is not looking, but it is safe to say he can never get it into the Hall of Fame. Prismatic Lake is only a hundred yards west of Excelsior.

TURQUOISE SPRING is just north, a few yards from Excelsior, and as its name implies, has the necessary exquisite coloring. In walking over this basin, heavy shoes are to be desired; the surface of the formation is hard and the water from the pools is spread out to a paper thinness.

The stages are waiting at the south side of the basin and we are off again. The road crosses to east side of the Fire Hole and all along there are things to see, and which the driver, with his usual courtesy, will point out to you.

BISCUIT BASIN, near 3+6, is on the west of the road, a basin where the formation takes the shape of biscuits. It is impossible to drive the stages on the formation; the only way to see it is to make a special trip down from the Upper Basin.

GEM is at the roadside, near 3+6. Near by are the Jewel Geyser, Sapphire Pool, and Mystic Falls, a very pretty cascade in the Fire Hole River.

ARTEMISIA GEYSER is on the right of the road.

MORNING-GLORY is the very prettiest flower of its kind in the Park. The prettiest morning-glory in the world, and the largest morning-glory; it is a pool with all the coloring just perfect; the stage rolls within five feet of its border of blue and you may look deep down into its depths and admire; the appropriateness of the name is conceded. It is near 2+7. Next on the right of the road and very near the river is the Fan and the Mortar.

RIVERSIDE GEYSER is on the left of the road and just a few yards above the bridge over the Fire Hole River; this geyser may be in action when you come along; if not, you can come back from the Inn, as a record is kept there of its time of action, at intervals of six to seven hours. The Riverside is different from the others in that it does not throw a vertical stream, but at angle and across the river, and there is always a fine rainbow effect. The crater right on the east bank of the river, just above the bridge, is an unpretentious hole in the ground with an occasional puff of steam, but if there is water running over the top you may expect action in a very little while, and when it comes it is a pretty sight, and there is always a good audience.

The **FAN** and **MORTAR** are near by, just below the bridge on the east side of river; the Fan is supposed to play just after the Riverside. The Mortar plays more frequently.

THE GROTTO is within ten feet of the Circuit Road on the east side, a hundred yards south of the Riverside bridge. The Grotto's name is well applied; the crater of fantastic shape is a grotto indeed. Eruptions of thirty minutes' duration occur at intervals of three or four hours, noted, not for any extreme height of play, but for its varied beauty; a small geyser near by goes into action with the Grotto.

Just south of the Grotto a side-road west leads to the Black Sand Basin, passing Wylie's Camp, one of his largest and best. To the north of the road near Wylie's Camp is the White Pyramid, and south of it the Comet and Splendid geysers.

SPLENDID is another one of the splendidly named geysers. Something after the manner of the Riverside, the Splendid departs from the usual vertical column of water and sends its stream at an angle, thus producing beautiful rainbow effects. The height of water thrown is 125 to 150 feet. Intervals between action are about two days, but when action commences, there are several eruptions two or three hours apart.

Near the Black Sand Basin are Specimen Lake, Sunset Lake and Emerald Pool.

PUNCH BOWL is one of the prettiest formations in the basin; it is a constantly boiling spring and always overflowing the rim of the bowl and building it higher all the time. The coloring of the Punch Bowl is superb.

BLACK SAND SPRING is on the right of the road and very near it. The coloring is fine.

EMERALD LAKE, Erin go Bragh! No true son of the old sod will fail to see the Emerald Lake of truest green, and he is sure to say it is the prettiest in the Park. He is well-nigh right. The Emerald is about a mile west of the Inn; you may walk or ride, but sometimes the stages take in that basin on their way in.

SUNSET LAKE is near by the Emerald, a few rods north; a foot bridge over Iron Spring Creek leads to the basin. The road to the Inn passes the **THREE SISTERS** and joins the Circuit Road near the Castle Geyser.

CASTLE GEYSER has a most imposing crater, not unlike a castle, or part of one; it is on the east side of the road. To build up this castle-like crater must have taken the deposits of eruptions for hundreds of years. The Castle's ordinary eruptions occur at intervals of twenty-four to thirty hours, throwing water sixty to seventy-five feet and vast quantities of steam. But, the extraordinary eruptions occurring every three or four weeks are worth while; then the column of water reaches a height of 150 to 175 feet. Near by is the beautifully colored Castle Well.

KLAMER'S COTTAGE and store is on the right of the road; an artistically beautiful cottage in the Old Faithful style of architecture; it is one of the Park's attractions. A store is always an attraction to the feminine mind, and where the women go there the men are also; this store is full of souvenirs, photographs, postals, pictures, Navajo blankets, bear rugs, jades, opals, agates and books, everything ornamental, and of the useful from cold cream to a collar button.

HAYNES' STUDIO is on the left of the road opposite the Inn. Besides



AT PAHASKA.

Haynes' famous photographs, there are paintings, water colors, souvenir books, postals, and pretty things too numerous to mention.

OLD FAITHFUL INN. Here endeth the journey of the day. The Inn is descri—, I should say mentioned, on other pages; it is not to be described on any page, that is impossible; nor are there any photographs that do it justice, but, where's the man that got his money's worth at Mammoth? He is not going to turn back at all now, he is going to stay right here at Old Faithful Inn, and with him are many more inclined to linger in the House of Logs and good living, in the rooms with the little, old-fashioned pane glass windows, with country curtains, where the split-bottom chairs are, and the peg in the log to hang your clothes on. Old Faithful Inn is good enough for us all.

UPPER GEYSER BASIN.

We have had a good, general view of the Upper Basin and some of the geysers from the stage as we come up the Circuit Road; the others can be taken leisurely.

OLD FAITHFUL, the grand old geyser that never disappoints anybody; always on time, "fresh every hour," as the candy-store sign says; fresh beauties every hour, irresistible. Why, I have seen a man who had been at the Inn for a week get up from a comfortable rocker and run when some one cried out, "Old Faithful's playing," and he had seen it from near and from far, from the porch, from his window, by daylight, moonlight, and searchlight, and he could not resist the temptation to leave his rocker and run to see it again.

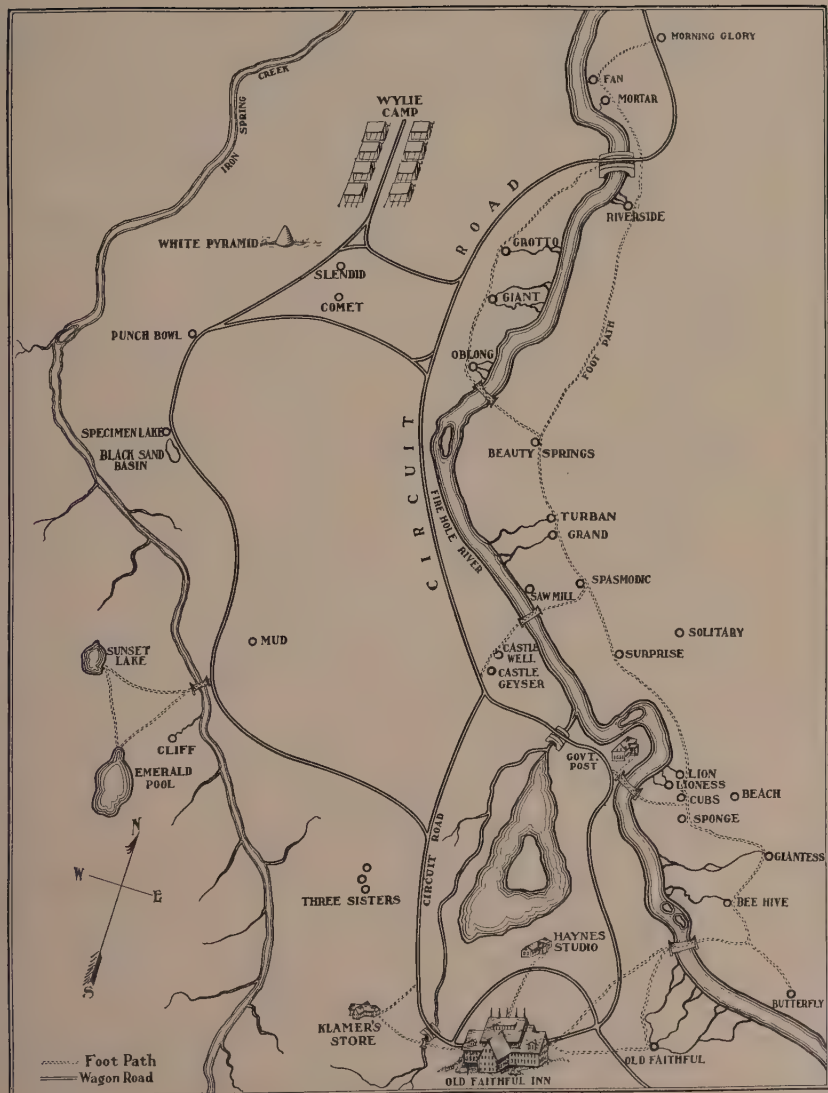
The average interval of eruptions of Old Faithful is sixty-five minutes, night and day, summer and winter, year in and year out, as it has for hundreds and hundreds of years. Old Faithful plays every hour, sending a stream of water from 100 to 150 feet. Duration of action, fifteen minutes. All people who come to the Yellowstone Park consider the journey incomplete until they have seen Old Faithful, the most perfect geyser in the world, in its regularity, its beauty of display, in the symmetry of formation and in everything that pertains to a geyser. Added to all this, the location is so near the Inn that it may be seen from its windows, from the porches, and from the dining-room.

At night the display under the powerful rays of an electric searchlight is magnificently beautiful. The searchlight is placed on the tiptop peak of the roof of the Inn, and thrown on the geyser, bringing out the colors with prismatic effect. The dummy clock on the porch of the Inn tells you when.

THE WALK WITH JOE over the Geyser Basin will prove a most interesting one. Incidentally, "Joe" is the head porter of the Inn, was there before it was built, and I may add, he knows more about geysers as they play or don't play, than anybody. He tells his story well, in a style peculiarly his own, composed of facts as to geysers' habits and reliable statistics. Joe gets his information first hand; he arrives in the Park early and stays late, and being a close observer as to geysers (his stock in trade) he is able to tell you when the Giant played last and when due again; with the others just the same, and his calculations are accurate. "Joe says" is to be relied upon. Joe's hour for starting is usually after luncheon; he will make it known when he is ready.

Joe's excursion over the formation commences at Old Faithful and extends north to the Riverside, taking in all the geysers of importance.

BUTTERFLY GEYSER is nearest Old Faithful. It takes its name from the shape of the pool, which greatly resembles a butterfly with outspread wings.



UPPER GEYSER BASIN.

BEE HIVE will be recognized at a glance; the cone is like the old-fashioned beehive, about four feet high, six thick at the base, tapering to three feet at the top, with a tube diameter of eighteen inches. Water from the Bee Hive is thrown to a height of 200 to 225 feet in a vertical column, with such force that the roar may be heard a mile away. Eruptions are very irregular indeed, but when its active season is on, they may occur every three or four hours; then a season of quiet for a month or more.

GIANTESS is in the eastern portion of the formation, near the forest. Eruptions occur at intervals of ten or twelve days and immense volume of water is thrown out, the eruption lasting from eight to ten hours followed by a column of steam; the water in a double jet reaches a height of seventy-five feet. The force of the eruption is so violent that it produces a mild form of earthquake.

SPONGE has a crater that greatly resembles an immense sponge both in texture and color, one of the most curious formations in the basin.

LION, LIONESS AND CUBS are naturally in a group, but they are not sociable as to eruptions. The Cubs and the Lioness will sometimes play together but the Lion plays alone every day to a height of sixty feet, the others less frequently; Lioness seventy-five feet.

SAWMILL, as all well-regulated sawmills, is industrious, playing five or six times every day with a regular sawmill sound. Near by are the smaller geysers, **SPASMODIC, BULGER, and TARDY.**

GRAND is one of the finest geysers in this basin. Its eruptions are at intervals of eighteen to twenty-four hours, duration twenty to thirty minutes; height of water column 175 to 200 feet.

TURBAN plays with a frequency that is gratifying, and when the eruption occurs simultaneously with the Grand, which it often does, the effect is fine.

BEAUTY SPRING is a pool of pretty water, blue, exquisitely bordered in bright tints.

ECONOMIC GEYSER is another of those appropriately named, as none of its water is wasted. After an eruption of twenty feet or more the water falls back into the crater again; there is no overflow.

GIANT has a cone some ten feet high, partially broken down on one side, probably from some violent eruption in the long time ago. Eruptions occur at intervals of six or eight days, playing an hour and a half to a height of 250 feet, and that's why it is the Giant.

OBLONG is oblong as to shape of crater, which is a very pretty one and its chief attraction. Eruptions are irregular; height of column of water thirty to forty feet, lasting only five or six minutes.

LONE STAR GEYSER is a little more than three miles east of Old Faithful, a quarter of a mile south of the Circuit Road at the junction of Spring Creek with the Fire Hole River, a lovely ride. The Lone Star was originally called "Solitary," which is quite correct, as it is solitary and alone, standing by itself in the woods with no other geysers nearer than three miles. A more appropriate name would be the Thimble; that is the shape of the cone, ten feet high and beautifully colored. Eruptions are from forty minutes to four hours, but the cone is worth going to see, and if on your arrival water is trickling down the north side of the cone you won't have long to wait. In eruption water reaches the height of forty to fifty feet.

UPPER GEYSER BASIN TO WEST THUMB.

Distance, nineteen miles. Milepost marked W T and U B. The ride is through primeval forest with here and there a dot of a meadow, up hill and down dale, one of the finest rides in the Park.

Leaving Old Faithful Inn, always regretfully, the stages come up to the door headed in opposite direction to the day's journey; but leaving the covered portal they swing around the circle in front, as if to give you a last, lingering look at the prettiest hotel in the world, then passing Old Faithful Geyser that may give you a parting salute, they take to the woods.

KEPLER'S CASCADE, 18+1, is just a mile from Old Faithful; the stages stop at the platform. There is a railing out on the rocks to the right of the road from which there is a fine view of the cascade and cañon in the heart of the forest.

The road follows the Fire Hole River crossing it three times, the last bridge being at 16+3, where there is a side road to the Lone Star Geyser. Here it leaves the Fire Hole and follows up Spring Creek till it ceases to be a creek, and becomes only a little rivulet trickling down the narrow, crooked cañon of precipitous rocks.

CRAIG PASS is at the summit of the cañon; through it and Norris Pass is the way to Shoshone Lake; it is up hill till 14+5, then nearly a level road along the brookside to 12+7. At 13+6 the storehouses and barracks for the road men are located.

The crossing of the Continental Divide from the Atlantic to the Pacific slope is at 11+8. The road crosses between two ponds; the water of the first flows into the Gulf of Mexico, the water in the east pond into the Pacific. Norris Pass is on the right.

THE CORKSCREW ROAD commences at 10+9 and a wildly exciting ride it is down that wonderful Corkscrew Road; a perfectly safe road, winding down the mountain-side, turning in and out in graceful curves till at last it crosses the ravine on curved bridge. DeLacy Creek is at 9+10.

There is a great sag in the road here. We have dropped down from the top of the Divide and must climb again before we can recross to the Atlantic slope, but before we do there is a grand view in store for the traveler, which he will come upon without any hint of it. The view does not grow, but bursts upon him.

SHOSHONE POINT, between 9+10 and 8+11. The stage comes slowly up the forest-bound road to a sharp curve and stops there; there is Shoshone Lake and far beyond, the giant Tetons. The viewpoint where the stages are is so high that you can see over the top of the forest far below, unbroken forests except here and there a little patch of meadow. The view is too grandly magnificent for words to tell; we drive on reluctantly. Some more Government houses are at 6+13. The mention of houses is made because they are such a rarity; nobody lives here.

THE DIVIDE is recrossed at 4+15, and henceforward we are on the Atlantic slope for rest of the ride. The road passes through some patches of meadows and dives into the forest again; now the numbers on the west side of the mile-



ALONG THE CODY ROAD.

posts are getting smaller, and at 2+17 there is the first glimpse of the Yellowstone Lake from the left side of the stage, and at 1+18, Lake View, the grand picture of that beautiful body of water, with the blue mountains beyond, and near the road on the left a pretty little lake all by itself in the woods.

Wylie's Lunch Station is on the right, the Patrol Station on the left, our station just ahead, which in the pleasure of the drive has been almost overlooked, but not quite. There is good cheer at this lunch place and much to see in the hour-and-a-half stop. The drive-whetted appetites will find no disappointment here; these good people of the Thumb Lunch Station have one duty to perform, the preparation of the noonday meal, and they do it well; they know just how many are coming; there is never any shortage and the last have just as much and just as good food as the first to arrive, and the Thumb lunch is not the least of the pleasant surprises of this every-way surprising drive.

There is an hour-and-a-half wait while the horses feed and rest, so there is time to visit the Paint Pots, and the Cone in the lake where you may catch a fish in the cold water of the lake and cook it in the hot water of the Cone without taking it off your hook.

THE PAINT POTS are a hundred yards north of the station; their coloring is fine and by some considered prettier than those at the Lower Basin; pink, red and terra cotta are the predominating tints. Near by are some pretty pools, and the Lake Shore Geyser which gives frequent display of 25 to 30 feet. The road from the Jackson Lake country and the South Gate joins the Circuit Road at the Thumb. This is also the road to the Tetons, Mount Sheridan and Heart Geyser Basin, where there are some very pretty geysers called Fissure, Deluge, Rustic, Spike. The Rustic is surrounded by a cordon of logs incrustured by the geyser deposit.

THE LAKE VOYAGE from the Thumb to the Lake Hotel is delightful. The boats are at the dock in front of the station and will start as soon after lunch as there is a full complement of passengers. The boat is not included in the fare around the Park. Tickets are sold at the Lunch Station and at the dock. You may leave your baggage in the stage. The course of the boats is straight away east, making a turn to the northeast after passing Rock Point, seen from the port side, then around Stevenson Island and north to the hotel, arriving an hour in advance of the stages. The scenery is simply superb; the great Absaroka Range, eastward of the lake, is in full view all the time and after rounding Rock Point in one grand sweep of the vision from north to the south and west, from Mount Washburn to Mount Sheridan there is one of the grandest views of the world. In their order from the north to the south the peaks are as follows: Cathedral, Chittenden, Silver Tip, Avalanche, Grizzly, Top Notch, Doane, Stevenson, Langford, Atkins, Schurz, Humphreys, Table, Turret, and far to the south and west Mount Sheridan and the Tetons.

THE GIANT'S HEAD, sometimes called the Sleeping Giant, is plainly outlined against the sky in the northeast; the profile of the monster face is clean cut and requires no stretch of the imagination to perceive its features. Old-timers thought Lake Yellowstone resembled the human hand, but the fingers are all thumbs now, with a couple of arms added. Another exploded fallacy is that Lake Yellowstone is the highest navigable water in the world. It may be the highest navigated water, but there are others of equal or higher altitudes that have waters sufficient to float a fleet, as Lake Titicaca in Peru, and others in the mountains of western Asia. Lake Patzcuaro and Lake Chapala in Mexico are nearly as high as Lake Yellowstone, which has an altitude of 7,740 feet above the sea. The shore line is most irregular and

measures more than a hundred miles. The area of Lake Yellowstone is 139 square miles. The depth is over 300 feet.

The voyage across the Lake has been so full of pleasure that the time passed quickly, and before we realize it the little boat is at the dock, and in less time than it takes to tell it we are safely ensconced within the hospitable doors of the Colonial Hotel, whose porticos and pretty façade have been in the view for the past half hour.

From the Thumb to the Lake Hotel the Circuit Road is through the forest with all the charms of a sylvan drive; there are glimpses of the Lake here and there, where the silvery waters glisten under the trees. Coming out of the forest around the north shore of Bridge Bay, Natural Bridge is seen on the east side and high above the road. It is a natural bridge of rock under which passes a little mountain stream that empties into the Lake. The other miles of this delightful ride are along the shore of Bridge Bay and the north shore of the Lake.

The Lake village is an important business center; there is a branch of the Weather Bureau, the store and boat headquarters of the W. E. Hofer Co., a Wylie Camp, a Patrol Station and usually a cavalry camp. Here is also the connecting point of the Cody Road to the East Gate.

Here is the ideal place to stay until you have recuperated from your travels, from sickness, or enervating influences.

"How long would you stay at the Lake Hotel?" asks one. As long as you enjoy the delightful ease, rest and recreation in good living. Until you get tired of resting, till you tire of a bracing atmosphere, till the beauty of landscape palls upon your tired vision.

Stay at the Lake till you are tired of catching fish. Here is the only place in the world where you can catch fish, whether you are a fisherman or not. No previous experience is required. You don't have to dig for worms, hunt frogs or catch grasshoppers. A rod and a line with an artificial fly is all that is necessary. Start out with these, either along shore or in a boat, and come back with fish. This is the inevitable and unanimous result, and you don't have to go miles away to hunt the good places. The fish are everywhere; you may stroll down from the hotel any morning and bring in a string. The hotel is supplied from the catches of the guests, but withal it must not be imagined that there is no sport.

A prominent Eastern man, high in the financial world, well known and respected, brings his large family to this resort every year. Having traveled extensively in every country under the sun, he says that nowhere on earth has he ever been where the air is like that to be found at Yellowstone Lake.

The drive up and down the Lake shore, the rambles along the beach and through groves, rowing and sailing, and excursions to the island, will fill the days of your stay with amusement and recreation. The hotel is beautifully located in a grove of trees on the hill about a hundred feet above the Lake level, affording a fine view, good air and excellent natural drainage.

There are bears that are regular boarders at the kitchen door of the Lake Hotel. Not so many as at the Fountain, but bears, brown, black and silver tip are equally interesting with the others we saw.

LAKE YELLOWSTONE TO THE GRAND CANON.

It is hard to say which of the drives of this great Drive is the finest, but the sixteen miles from the Lake Hotel to Cañon Junction is the most varied in its attractions of forest, meadow, river and mountain view.

The mileposts are marked C J and L H, meaning Cañon Junction and Lake Hotel.

The first mile is through the forest, then out into the open. After leaving the hotel, within a mile are the Patrol Station on the right, Wylie's Camp on the left, the cavalry camp also on the left, and the bridge of the Cody Road over the Yellowstone River on the right. Also on the right of the road, just east of the Patrol Station, is a stone placed by the United States Corps of Engineers in 1893 to mark the exact latitude and longitude. The stone is inscribed with these calculations: Latitude 40° 33' 16.1" North; Longitude 110° 23' 43.1" West; Magnetic Variation 19" East.

The river is on the right and never out of the view, and so near to its banks the road is that you can see the fish swimming in the coves and pools, and immediately you want to get out and go after them; and, let me tell

you, you could land them with the driver's whip; it has been done; a "leader and a fly" attached to the whip lash dropped on the water will bring a strike, and if you are careful you can land your fish, if the driver will lend you his whip, which I think he won't do, but if he will you can prove the story. I have caught a fish with the driver's whip.

At 12+4 are the first rapids and cascades of the Yellowstone River and here you may see what you perhaps have never believed; you may see fish jumping over the cascades on their way upstream.

The ride thus far has had the forest on one side, the left, and the river on the right, with little meadows here and there; then comes beautiful

HAYDEN VALLEY of spreading meadows, sloping to high hills on either side with the beautiful Yellowstone River winding its waters in between. Here are the feeding grounds of the elk, the antelope and the deer. Elk are shy and will not come near the road but may be seen in herds of hundreds any day. Pelicans by the score are in the marshes and gulls are flying restlessly up and

down the river. Deer are most likely in the timber patches, but the whole valley is alive with living creatures—fish, flesh, and fowl.

MUD GEYSER is near 7+9. Surely this is the Devil's Own, a boiling, seething caldron of thick, muddy water that has a strange fascination. If there ever was a typical bit of hell on earth it is here at the Mud Geyser. Twenty years ago the eruptions were so violent that the thick, pasty mud was thrown more than a hundred feet from the crater, covering the trees with a slime that completely concealed and dried on their branches. Eruptions now are exceedingly rare. There is a platform where all stages stop.

TRADE MARK CREEK, otherwise called, and on the map Trout Creek, is near 8+8. I could call it Trade Mark Creek because in its graceful curves, on the left of the road and fifty feet below it, completely describes the trade-



JOHN GOFF, ROOSEVELT'S GUIDE.

mark of the Northern Pacific Railway; it could hardly be done more accurately by a landscape gardener, and as it is made by the natural curves of the creek through the grassy cove, it is all the more wonderful. The farthest mountain to the north is Mount Washburn. Straight ahead you can see a red spot in the meadow, high on a hill; that is the roof of the Cañon Hotel, eight miles away.

SULPHUR MOUNTAIN is a high hill to the left of the Circuit Road, near 5+11, with a side road leading to the boiling sulphur springs on its western slope, of no special interest to any one except the close student of Park phenomena. The Circuit Road continues its straight course on the east side of the mountain and near the river.

ALUM CREEK, whose waters, according to the jokes and legends, cause such an extraordinary shrinkage of value in articles immersed, is near 3+13.

SPURGIN'S BEAVER SLIDE is on the west of the road, near 2+14. A tablet informs that near here Captain Spurgin let his wagons down the mountain side with ropes during the Nez Percé campaign in 1877, when General Howard was in pursuit of Chief Joseph and his band.

The road now is on a shelf cut in the high hills on the west side; on the east side the river is almost under the road, madly rushing on to the running jump over the Upper Falls. Near the bridge over a ravine, on the west side, is the tree on which are inscribed the initials J O R, Aug. 19, 1819. At 1+15 the beautiful Melan Arch bridge crosses the Yellowstone River with a single span of 120 feet; over this bridge is a side road down the south side of the Grand Cañon to Artist Point, where Thomas Moran made his studies for the magnificent painting in the Capitol at Washington. About a quarter of a mile east of the bridge on the left of the road is the gulch of the easiest descent to the water's edge in the Grand Cañon and to the foot of the Great Falls. Here is where "Uncle Tom" had his ladders, that were replaced by a stairway that in 1907 was removed. But the gulch is still passable for good climbers. The view looking up from the bottom of the Cañon is superb. There is a small geyser about 200 yards east of the Falls, right on the water's edge; it plays all the time, hot water within three feet of ice cold. Here also you may prove the story of hot rocks in the bed of a stream of cold water; lift one from the river, the top is cold, the lower side hot.

ARTIST POINT is the only viewpoint on the south side that has a platform and railings. The magnificent view is perhaps better seen from here than from any other point. It extends from the Great Falls on the west to the high cliffs at the turn of the gorge on the east, a distance of five or six miles up and down the Cañon. Descriptions are not possible; the grandest story ever told would be the one describing the Grand Cañon of the Yellowstone. It would be called exaggerated, if believed at all, and when you come upon the scene you be sure to quote the Queen of Sheba's remark when she arrived at the court of King Solomon. This pen of mine is unequal to the task, and greater ones have failed.

Coming back from Artist Point, and just before reaching the bridge, there is a fine view of the Upper Falls on the right; this view can, of course, be seen going up to the Point, but on the return it is right in front of you. The road is all the way through the woods, with no hint of the great gorge within a few hundred feet, till you arrive at the Platform of Artist Point. Back on the Circuit Road again the stages roll along the smooth roadbed high above the foaming rapids.

THE UPPER FALLS are "upper" as far as the course of the river is concerned, but geographically they are the opposite. The stages stop at the platform near 1+15, where there are substantial stairs leading down to the brink,

where the rushing river makes its first leap to the lower levels, 112 feet. The view of the Falls, the Rapids above and below, are incomparable, and may be enjoyed without going down the stairs, if one does not feel equal to the going down and coming back—principally the coming back—but they are easy stairs, strongly built and entirely safe.

Now for the Cañon Hotel and then the Cañon. After leaving the Upper Falls the road is through the woods for one more mile, passing on the right the picturesque Patrol cabin, and on the left the Wylie and other camps.

CAÑON JUNCTION is where the road to the Cañon and to the Cañon Hotel leaves the Circuit Road. The road straight ahead and to the left leads to Norris over which the stages go on the return trip after the visit to the Cañon is over. To the right is the way to the Hotel and the Cañon, crossing Cascade Creek on a beautiful bridge of steel. On the right are the first glimpses of the Cañon. This is a steep hill we are climbing, rounding in curves to the top where the hotel is and where there are some of the finest views of landscape in the Park.

GRAND CAÑON HOTEL is splendidly located on a hill a thousand feet above the Great Falls, and may be seen from the coaches coming up from the lake when they are yet eight miles away. The view from the hotel is a magnificent one. Park wagons start from the hotel for excursions down the Grand Cañon. The road follows near the brink of the Cañon. The first stop is at Point Lookout, half a mile below the Falls. The view platform is 1,200 feet above the river. Red Rock is some hundreds of feet under Point Lookout, requiring a climb over a narrow trail, but a perfectly safe one.

Grand View is the next stop of the wagons. Here is a fine view of the Cañon up and down. Inspiration Point is regarded as the point of view affording the grandest pictures and widest expanse of panorama. The platform is 1,500 feet above the river, two miles from the Falls. The order of stops may be reversed by going straight through to Inspiration Point and make stops returning. Descriptions are utterly impossible. They are well attempted by many of our greatest travelers and writers, but their eloquent words fail most completely to give any idea of the stupendous grandeur of the Grand Cañon of the Yellowstone. There are many other minor places along the Cañon from which there are splendid views, and after the ride in the wagons these may be made the object of delightful rambles.

Of course it all depends upon how long you can stay at the Cañon as to what you may do, or in the vernacular "take in." You might stay all summer and not remain too long; but we will take it that you are on the regulation tour, and, say, take the ride down to Inspiration Point making all the stops going or returning, and when that is over take the ramble down the stairs or over the trail to the brink of the Great Falls, the Lower Falls. If I were to make a choice I would say, for myself, down the stairs and up the trail. There are seats on the stairs where you may sit down and rest either going down or coming up; on the trail it is an easy climb and you can stop anywhere to rest.

THE GREAT FALLS of the Yellowstone have not a rival on earth, and as you stand at the brink, at the bottom of the stairs, you haven't a word to say that can express your awe and admiration. The river that was 250 feet wide along the road from the Lake has narrowed down to exactly 74 feet at the brink, where it leaps over the precipice 310 feet to the surface of the water at the bottom of the Falls. It is estimated that the depth below the surface, ground out by the force of the falling water, is 50 feet, making the total distance from the brink to the earth under the Fall 360 feet.

There is no single spot in the Falls of Niagara that equals this in beauty;

even the great Horseshoe Fall of that famous cataract is not to be compared to the beauty that is here.

The falls at Niagara are wider, the line of precipice longer, but the height of fall in the Yellowstone would make Niagara look like a mill dam.

The rides and rambles about the Grand Cañon will fill many days with pleasure, that we cannot describe, but only tell you where they are. Every scribe of the press has "written up," not described, the Cañon, but has created a desire to see, and seen the futility of the task descriptive. It is apparent to the most casual observer, and I think that the woman that looked over Niagara and asked "Is that all?" might indulge in a couple of "Ohs!" if she glanced over the Grand Cañon of the Yellowstone.

THE CAÑON is over 2,000 feet wide at the top, 1,500 to 1,700 feet deep and perhaps 75 to 150 feet wide at the bottom. The Cañon is 20 to 25 miles long



FISHING, OR HOT WATER CONE, YELLOWSTONE LAKE.

from the Falls north and east. There are longer, wider and deeper cañons, but none have that beauty of diversified coloring that exists in the Yellowstone. You might put three or four of these cañons with the Yosemite, then dump the whole lot into the Grand Cañon of Arizona and hardly find them, but the grand magnificence of color, the superbly beautiful walls with its points and pinnacles exist only in the Yellowstone. The colors of the Arizona Cañon are only atmospheric effects; its walls are of adobe color, and the river muddy. In the Yellowstone the walls are in all the tints and colors of the rainbow, and the river a lovely green flecked with the white foam of the rapidly flowing water; the tints of green vary in their shades as the water is deeper or shallower, and as it may be in shadow or sunshine. For indefinable beauty and grandeur choose the Grand Cañon of the Yellowstone. It will live in your memory when all the others are forgotten.

The oft-quoted Talmage says:

"Hung up and let down and spread abroad are all the colors of the land,

sea and sky. From the dark, forest-bordered brink, the sides descend for the most part with the natural slope of the loose rock, but frequently broken by vertical ledges and isolated pinnacles, which give a castellated and romantic air to the whole. Eagles build their nests here, and soar midway through the vast chasm, far below the beholder. The more prominent of the projecting ledges cause many turns in the general course of the Cañon, and give numerous vantage places for sightseeing.

"The gorgeous coloring of the Cañon walls does not extend through its entire length of twenty miles. In the lower portion, the forests have crept well down to the water's edge. Still, it is everywhere an extremely beautiful and impressive sight. Along the bottom of the Cañon numerous steam vents can be seen, one of which, it is said, exhibits geyseric action. In places, the Cañon walls almost shut out the light of day from the extreme bottom. Lieutenant Doane, who made the dangerous descent several miles below the Falls, records that 'it was about three o'clock p. m. and stars could be distinctly seen, so much of the sunlight was cut off from entering the chasm.'"

INSPIRATION POINT is three miles down the Cañon and at the end of the road that runs from the Hotel and Cañon Junction for the most part on the brink of chasm. Stairs and a wide platform afford an easy approach and a safe place on the Point from which the grand views obtain.

From the Falls in the west to the turn in the Cañon in the east is the scope of the view from Inspiration Point, about the same scope as from Artist Point on the opposite side, but the views are entirely different as seen from the two points; but the river so far in the depths is the same lovely little green ribbon winding in and out under the shadow of walls of yellow, red, sepia, brown, cream and all the other colors mingling into unnamable tints of great beauty.

There on a slender crag is an eagle's nest with its little eagles afraid to fly, but some day soon the mother-eagle will tire of their chirping whistles and push them out of the nest. Then they will just have to fly, but she won't let them fall; if they flutter in an uncertain way she will dart under them and give them another start, or perhaps bring them back home again for a while; but time is up, and very soon they must go out and catch their own fish and start families of their own.

These crags have their eagles' nests year after year; whether occupied by the same eagles it is impossible to say, but the nests, the eagles, old and young, are there every summer. There is a record, however, of fifty-five years for one pair of birds that had their nest near the Great Falls of the Missouri River. The nest was on the high stump of a dead tree. It was observed that the eagles came and went as the summers did, till finally some surveyors found the tree in their way and cut it down; but for this advance of civilization the tree and eagles might be there to this day. This is a good eagle story that can be proven, all except how many fish they caught and how big they were.

THE CASTLE WALLS are just at the turn of the road in the approach to Inspiration Point. A thousand castellated pinnacles shaped by the elements in their thousands of years standing there, the richly tinted colors gaining new beauty in every washing rain and succeeding sunshine.

In the going to and returning from Inspiration Point you will pass, on the north of the road, the only piece of *granite* in the Yellowstone Park, a huge boulder that may have been dropped here during the glacial period, that somebody has called the "Devil's Watch Charm."

GRAND VIEW is another of the vantage points for views of the Cañon. The object of these view platforms is to give every possible advantage to see the Cañon at all its angles. Grand View is between Point Lookout and

Inspiration Point. There are other approaches to the Cañon brink that as yet have no stairs or platforms, but may serve the purpose of the more enthusiastic who do not get enough at the regular stops.

POINT LOOKOUT is nearest the hotel and nearest the Falls. It is an easy walk to Point Lookout, and the views are very fine, indeed. Just east of the Point is a great slope of the sands from the brink to the river, where deer and other animals can zigzag a course down to the water; you can see the tracks crossing and recrossing all the way down.

Once upon a time a man and a woman of a camping party attempted to follow this deer trail and go down to the river. After they had gone three or four hundred feet they became frightened and could neither go on nor return; they clutched their hands into the loose sand to maintain their position and shouted for help. The woman lost her wraps. Why she



BIG HORN SHEEP.

had them with her I don't know. The man held on to his wife and the side of the slope and let go of his camera, which rolled blithely; I say blithely because the camera's roll down the slope was the only "blithely" thing about the incident.

In the meantime their companions of the camping party, who sensibly remained with their wagons, had lashed together all their available ropes and bridle reins, which, tied to a stone was rolled down to the foolhardy pair and they were rescued as we stood and looked on without being able to help.

Doubtless the man bewailed the loss of his camera, but he didn't lose it! That afternoon Mr. Walker, the then manager of the Cañon Hotel, who did "stunts" of going down to the water by a route of his own every day, standing on his head on crags and other circus tricks, went down, found the camera within two feet of the water and brought it back uninjured and not a film spoiled, and it was only a two-dollar camera.

RED ROCK is right under Point Lookout, about half way down. It is a bright red pinnacle that can be seen from all parts of the Cañon. It is the place from which the most of the photographs of the Falls are made, and a favorite place with the hunters for the colored sands so much sought after for souvenirs. It is not an easy trail that leads from the bridge at Point Lookout to Red Rock, but perfectly safe, and well worth the climber's while, if only for the near view of the Great Falls. The trail is rough; it will take half an hour to go down and an hour and a half to get back, but one never forgets the trip to Red Rock.

THE BRINK OF THE FALLS, a path leading just a little to the right from the veranda of the hotel, will take you down the hill to the stairs to the brink of the Great Falls of the Yellowstone. About half way down you may leave the stairs, get under the rail on the left, and walk out over a perfectly safe path to a point directly over the Falls; the view is superb. However, continuing down the stairs, there are convenient landings with seats where you may stop and rest, and which you will avail yourself of coming back. These stairs bring you to the water's edge, where the Yellowstone River leaps over a precipice 310 feet high, from the second to the third level of that beautiful stream. What you will say when you have come here I can't write down; the roar of the falling waters are in my ears and I can't hear what you do say, but your eyes are expressive and by their wide-open lids I can interpret somewhat.

The mighty river that you saw on the ride from the Lake contracted its width in the rapids above the Upper Fall again when it made that leap, and here the cliffs have narrowed down, leaving only a little slip of 74 feet for all this water to pass.

The spray blows mostly to the left or north side of the Cañon, producing a delicate growth of moss like grass on the slope; on the other side there is always a patch of snow left over from last winter, unmelted in the shadows of the cliffs on that side.

Is there ever another place just like this, where grass and moss grow within a hundred feet of snow, the sunshine producing one and the lack of it preserving the other?

You can see the more venturesome travelers at the foot of the Falls on the other side of the river; they are down where the hot rocks are, and the little geyser; they are looking up to you and waving for you to come on down, but you can't unless you go back to the bridge and to Uncle Tom's gulch, where the ladders were, but are not.

Down the Cañon the view is superb. Red Rock is on the left, its brightly colored pinnacle lifting up almost to Point Lookout just over it, then far away Grand View and Inspiration Point, also on the left, and Artist Point on the right, all high on the top of the Cañon; but your gaze is deep down in the depths below, where the little green river is, that is running away so fast from the tumult of spray and falling waters. Now, does this intense fascination still hold you, or are you ready to go back? All right, you go up the stairs; I am going to strike the trail, *the old trail* with its easy grade, that is all right except about twenty feet, which should be fixed. This trail brings you back to the old bridge over Cascade Creek, and then it is an easy walk back to the hotel, but the stairs are better except for the climbers.

From all this grandeur of magnificent scenery the human mind turns back to—bears. There are plenty of them up on the hillside back of the hotel, and I have never seen a man, woman or child that was too tired, too busy, or who would not leave the dinner-table to go and look at a bear wild in the woods.

"Let's go and see the bears." "All right, let's."

MOUNT WASHBURN is one of the things to do while you are at the Cañon. Mountain wagons leave the hotel every day. This ride of a lifetime is described in another chapter.

Now, are you, after this eventful day, are you ready to go to sleep—
To sleep,
Perhaps to dream;
Aye, there's the rub—
To sleep, to dream

as did Frances Calveard, who, being a woman, dreamed of brides and weddings and wrote thus of

THE BRIDE OF THE YELLOWSTONE.

It was night—and while the moon,
With sweet music a love tryst kept,
I to the arms of Morpheus crept,
And dreamt I heard the wedding march played.
Methought I saw the Park arrayed
In festal robe. The miles and miles
Of Christmas trees were royal aisles.

On Pulpit Terrace the clergyman stood,
To join in wedlock the woo'r and woo'd—
And maids from the mountains, dark and fair,
Scattered wild flowers everywhere;
While rivers and rocks, below and above,
Chanted together sweet songs of love.

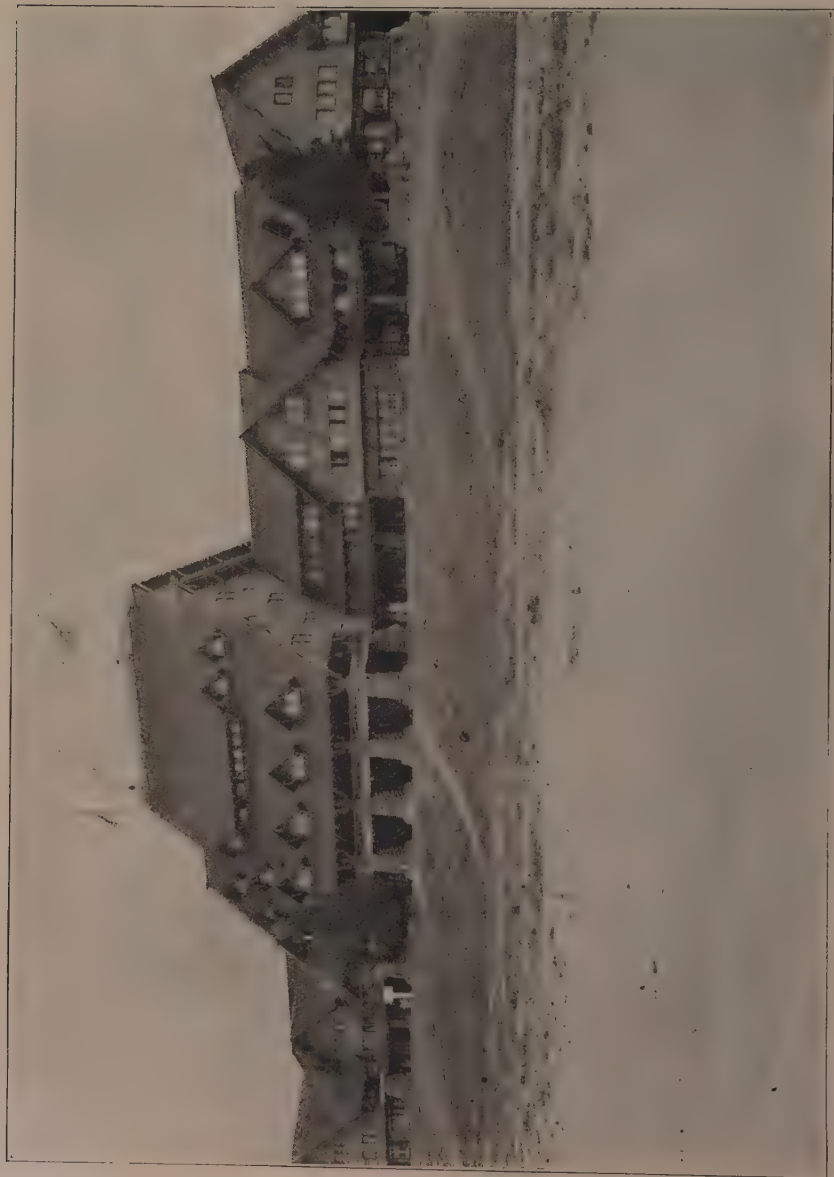
Then came the bride, most regal and splendid—
The Yellowstone Falls, by the geysers attended;
Following then, the clear springs and laughing cascades—
Never had bride such lovely bridesmaids;
And never had groom such attendants, I ween,
As the lofty mountains that graced this scene.

Through the Golden Gate the procession came,
Then on to the Terrace of worthy fame,
Where the Grand Cañon in great glory and pride
Awaited the coming of his fair bride.

Then 'mid the vales and mountains and skies,
To wondrous music God's service was read;
And the Belle of the Forest, the Yellowstone Falls,
To the Grand Cañon, her lover, was wed.

* * * * *

Now what would you say were I to tell you,
It was no dream at all, but every whit true;
That the glorious colors in the Cañon's array
Are lingering gleams of that glad wedding day—
And the beautiful vision from the precipice rail
Is the Bride of the Cañon, still wearing her veil.



OLD FAITHFUL INN.

CAÑON TO NORRIS

Eleven miles. Mile-posts marked C J and N B for Cañon Junction and Norris Basin. It is a mile from the hotel to Cañon Junction, where the distances shown on the mile-posts begin. Before leaving the Cañon a very interesting souvenir of your tour of the Yellowstone Park may be obtained by arranging with Haynes' photographer, to make a photograph of your stage and party with the Upper Falls as a background. The artist has his office in the curio stand in the hotel.

The Circuit Road runs almost due west and through the forest nearly all the way to Norris. The early morning ride is a most pleasant one, and there are deer and other wild animals to be seen. After leaving the Junc-



A SOLDIER'S CABIN, NEAR TOWER FALLS.

tion it is a heavy up-grade for some miles, then straight away on the level and down grade. You will notice that the right-of-way has been cut out to double width on the south side of the road, to get full benefit of the sunshine in the early spring and melt away the snow that would otherwise impede travel till far into the summer.

THE WEDDED TREES are on the left of the road, near 5+6. Two tall trees are united by an ingrowing limb about 15 feet from the ground. This phenomenon is noted also on the Cody Road and in the other parts of the Park. The branch of one tree has by some means become grafted into the other. At 4+7 the road comes to the headwaters of the Gibbon River,

which it continues in sight of till arrival at Norris, crossing the stream several times.

VIRGINIA CASCADE, one of the prettiest in the Park, is on the left of the road near 3+8. The old road up to 1902 followed down the stream, taking a very steep hill to the foot of the Cascade and making a 180-degree curve around the Devil's Elbow; now a new and much better road with easier grades continues on top of the Cañon, affording fine views of the Cascade and the Elbow from above.

Now look straight ahead. There are the snows of the Gallatin Range and Electric Peak, a very beautiful view.

Near 1+10 the circle of the Circuit Road is completed. There on the hill is the flag of Norris Lunch Station, the house of gingerbread, which I just know you have not forgotten. An hour-and-a-half stop gives ample time for lunch and for renewal of geyser acquaintance.

The man who was ready to turn back at Mammoth says he is quite ready now, but is "willing to start out right now and do it all over again," and he will some day.

The circle is completed.

Those who came in at Gardiner and are going out at Yellowstone will change to the M-Y stages at Norris, having previously arranged their tickets at Mammoth. They will double the road through the Gibbon Cañon and go out through Christmas Tree Park to the train at Yellowstone Station.

Travelers out via Mammoth and Gardiner will double the road to those points, changing from stage to tallyho at Mammoth.

The doubling of these parts of the road has no disadvantage; on the contrary, it is most interesting. Every feature and point of interest will bear an encore, and you have a different point of view on everything. For distances and descriptions, turn back to the first pages of the Drive chapter.

The larger numbers on the mile-posts will be on the near side as you approach, and will grow less, of course, as you travel on; the rest is easy. You have been around the rim of the "skillet" and are now going down the handle; you have done the Circuit Road when you finish the Drive at Mammoth.

But, one word more: If, when you started on this journey and came up the hill from Mammoth to the Golden Gate, you thought it was very beautiful, look now, look every minute from Rustic Falls, the viaduct of the Golden Gate, the Gargoyle, the Hoodoos, and from the Silver Gate look out over the valley, and keep looking till you pass the Terraces and drive up to hospitable doors of the Mammoth Hotel. It is very beautiful, isn't it?

P. S.—The man that was ready to turn back from Mammoth has concluded to stay over another day, anyhow, "just to see the Terraces again," he says.



Roads

THE CIRCUIT ROAD as referred to in these pages commences at the North Gate, Gardiner, Montana, runs southward to Mammoth Hot Springs, 5 miles; thence still south to Norris, 20 miles; then southwest to the Lower Basin, Fountain Hotel, 20 miles; thence south again to the Upper Basin, Old Faithful, 9 miles; now eastward to West Thumb, 19 miles; then northeast to the Lake Hotel, 17 miles; northwest to hotel and return, 2 miles; west moth, 20 miles; and thence to of 144 miles as the stages go. This wild and woolly west, might be handle commences at Gardiner runs around the rim of it to the the Cañon, and back to the handle West Gate, Yellowstone, joins of the Fountain Hotel and fifteen a total of twenty miles from the

The Cody Road from the East the outlet of Yellowstone Lake a Hotel on the Lake; distance from Gate road, when it is opened, will Union Pacific Railway and will Thumb, with a distance of sixty stages will return from the Cañon Tower Falls and Yancey's on ery on that route and the Cañon and Norris, and the road between Nor-be avoided; but, at this stages are incomplete at Tower Falls or tance from the is forty-two miles one via Norris. The from the various and attractive, but part must be taken horseback and vary day, but scarcely one that and while the way is not and by no means rough. None included in the transportation ticket and all require individual arrangement, or you may walk, and in many cases you can.

From the Mammoth Hotel you may walk or ride to the terraces, the extinct geysers and hot springs. But you must ride to Osprey Falls and around Bunsen Peak by wagon or on horseback, and down the road towards Yancey's; all the other attractions are seen from the Circuit Road, unless you wish to climb Mount Everts, Electric Peak or go fishing in the streams round about.

Cañon Jct., 16 miles; Cañon Jct. to Norris, 11 miles; north to Mam-Gardiner, 5 miles, making a total road, in the vernacular of the called the "Skillet Road," as the and joins the skillet at Ncrriis, Fountain, Old Faithful, the Lake, at Norris. The road from the the Circuit Road five miles west miles from Yellowstone, making West Gate to the Lower Basin. Gate joins the Circuit Road at mile and a half east of the Colonial Cody, ninety-six miles. The South come from some point on the join the Circuit Road at the to seventy miles. Eventually, to Mammoth via Dunraven Pass,

account of the beautiful scen-lack of it between the

the present doubling of ris and Mammoth will writing, the roads for and there is no hotel Yancey's. The dis-

Cañon to Mammoth as against thirty-side roads and trails hotels are numerous the rides for the most in light wagons or on from a few hours to all

is not worth the while; a macadam they are safe,

of these drives or rides are included in the transportation ticket and all require individual arrangement,



From the Fountain Hotel one of the most important side rides is to the Fire Hole Lake and the Great Fountain Geyser, which will be neglected by no one who would fill his journey of wonders. Of course some one will say that the Great Fountain is but another geyser; true, but one of the finest in the Park and wholly different from any other. Yes, but what of the Fire Hole Lake? There is only this one in all the world; it is just two miles from the Fountain Hotel and off the line of the Circuit Road, but see it if you have to stop a day to do it. The Great Fountain is near by and both may be seen on the side ride. The Great Fountain must not be confused with the Fountain Geyser in front of the hotel. You may walk to the Paint Pots and to the Fountain Geyser or to the Fire Hole River for fishing, but it is better to ride to the latter, as you may extend your fishing to the Madison River or the Nez Percé Creek.

THE WEST GATE ROAD from Yellowstone connects with the Circuit Road five miles west of the Fountain Hotel. Leaving Yellowstone the road is east through Christmas Tree Park, a beautiful plateau well deserving of the name.

Just outside the Park is "Dwelle's." Ever been to "Dwelle's?" Then you have missed something out of the ordinary. Dwelle's is on the old Monida road and not seen by the traveler entering at Yellowstone, but it is worth while to go up there; it's only a few miles and when you have been there you will know why the name, "Grayling Inn," never would stick, and why it always remained Dwelle's, and when you have seen Mr. Dwelle and have slept under his hospitable roof and eaten from his table you will know what it is to have been "out west." There is a charm and a fascination about Dwelle's that is simply irresistible; but if you expect to dress for dinner, and to find *pate de foie gras* or lobster a la Newburgh on the menu, don't go, because there isn't any menu, but there's steak and gravy and hot biscuits in plenty, and potatoes and beans, and if you want a good time in a primitive way, go to Dwelle's. It is worth while if you didn't do anything but visit with Mr. Dwelle and have him show you the store and his ice-box in the creek. There is fine fishing, but the chief attraction is Dwelle's.

The old road required a stopover at Dwelle's, but the completion of the line to Yellowstone cut it out; now the stages leave the cars and go straight away east through Christmas Tree Park, passing the military patrol station, then along the lovely Madison River to the junction of the Gibbon and Fire Hole rivers, making the first stop at the Fountain Hotel.

At the junction of the three rivers, Fire Hole, Gibbon and Madison, the first two forming the latter, was the last camp of the Washburn-Doane-Langford-Hedges expedition after their exploration of the Park in 1870, and on this spot the first suggestion was made to create a public park here. The proposition came from Cornelius Hedges. A tablet by the roadside marks the spot. Just opposite is Mount Yellowstone or National Park Mountain, and all along, first on one side of the road and then the other, the rivers run rapidly, falling into cascades and disappearing into cañons. In the earliest days this route was used by the pioneer explorers, and as a trail Chief Joseph and his Nez Percé warriors followed it in their raid through the Park in 1877.

Another ride from the Fountain may be made up the Nez Percé Creek to Mary Lake and Mary Mountain, and there is a trail straight across the plateau to the Hayden Valley.

From Old Faithful Inn there is a lovely drive to Lone Star Geyser, which is not on the Circuit Road and cannot be seen from the stages; the ride to Lone Star may be continued further on towards Shoshone Lake and the good fishing places that are there. The drives about the Upper Basin may be

repeated again and again without monotony, as one never tires of good roads; all the great geysers, pools and lakes are in the view; Wylie's Permanent Camp is just on the north side of the Basin.

From the Thumb Lunch Station a road leads directly south to Lewis and Jackson lakes, and thence on through the Forest Reserve to where the South Gate will some day be located and a connection made with the Union Pacific Railway somewhere in the state of Wyoming.

From the Colonial Hotel on the Lake the side drives are through the forests, to Natural Bridge and Bridge Bay, to the outlet and across the bridge over the Yellowstone River out on the Cody Road, or down the Circuit Road to the cascade. However, rowing, sailing, or naphtha launching is preferable



A THREE HOURS' CATCH—YELLOWSTONE RIVER.

at the Colonial, as all the drives are, for the most part, on the Circuit Road and are gone over by the stages.

THE CODY ROAD leads to the East Gate from the Lake outlet to Cody, Wyoming, ninety-two miles; the Government road operations cover the entire distance except about ten miles east of the Shoshone National Forest.

Mr. E. A. Abbott, the litterateur of the Chicago, Burlington & Quincy, was over the Cody Road in July of 1908 and writes entertainingly as follows:

"The beauty and grandeur of the scenery have never been adequately described, nor do I believe can be; but the principal characteristic features of the scenery may be named in their order so that one may get a general idea of the route.

"The natural beauty of the scenery for the entire distance far surpasses that of the regular Park tour, with the important exceptions of the Falls and Grand Cañon of the Yellowstone River, which are incomparable, unique; Mount Washburn, not included in the regular Park tour, and one or two other minor exceptions should also be made.

"The first thirty miles lie entirely within Yellowstone Park, the next thirty-six miles entirely within the Shoshone National Forest (formerly the Yellowstone Forest Reserve), and the remaining twenty-six miles through the widening valley of the North Fork of the Shoshone River; Cody, strictly speaking, being the first point located in the Big Horn Basin proper.

"It might be thought that such a long drive would be tiresome, but it is not; the delightful sights and scenes en route are a source of constant diversion, and tend to keep one from growing weary, but altogether, aside from this, the two-seated, covered mountain wagons or surreys, commonly used, are so comfortable that one need have no fear of weariness because of the length of the ride. In fact, the longest single ride is from the Lake Hotel to Sylvan Pass, twenty miles, and two rides of this length are taken in a single day on the regular Park tour.

"The good roads also make for comfort; they are maintained by the Federal Government for practically the entire distance, and large sums of money are annually spent to keep them in good condition.

"From the Lake Hotel (elevation 7,790 feet) to Turbid Lake (ten miles) the road is almost level and lies alternately through stretches of thick-set forests of very tall lodge-pole pine and beautiful grassy meadows.

"The altitude of Sylvan Pass is 8,600 feet, so that the climb from Turbid Lake and Hot Springs is not nearly so long or so steep as the one on the eastern slope.

"Shortly the lodge-pole pine gives way to the Douglas fir and Engelmann spruce, the most stately and beautiful of all the Park trees both individually and collectively, and these we have constantly with us.

"The road is almost tortuous in its windings, and an ever-changing prospect greets the eye, one moment a splendid panorama of Yellowstone Lake, then appears a towering forest-clad mountain with its snowy peak and an intervening cañon of great depth, through the bottom of which rushes one of those numerous clear, cold streams of snow water—the natural home of the mountain trout, and next perhaps is an open, level grassy glade, a favorite feeding place for the elk and deer, and so it goes; each scene seeming more entrancing than the last, until, always gradually climbing, beautiful Sylvan Lake is reached.

"Although almost at the summit of the Pass, this mountain gem seems to nestle at the very foot of the lofty forest-clad, snow-topped mountains which cluster about it protectingly on all sides. It is a never-to-be-forgotten scene—the bright blue of the sky reflected in the clear depths of the lake, the white snow splotches contrasting with the varying greens of the forest slopes, over all the bright lights and shadows of a noontday sun, and round about Nature's quiet, never quite perfect, and here broken by the murmur of the nearby tumbling cascades and mountain streams and the occasional note of a mountain songster.

"Sylvan Lake abounds with good-sized trout easily caught; a short distance beyond is a smaller, Eleanor Lake, a stream with snowdrifts on one side and forest on the other, one of the most beautiful of many cascades and waterfalls. It is interesting to note that the waters of this cascade divide into two streams, all the waters eventually reaching the Missouri, part through the Yellowstone and the rest through the Shoshone and Big Horn rivers.

"Proceeding on a few feet we are at the summit; the Pass itself, only a few hundred feet across, presents a curious aspect—the action of the frost and water having so broken up the rising and almost precipitous slopes on either hand as to completely cover them with broken stone, giving the appearance of the refuse pile of a stone quarry.

"The beauty of the landscape is only momentarily obscured by the sides of the rocky pass, and as we reach the brow of the eastern slope we are not only struck with the great beauty of the scene, but we marvel at the ingenuity which must have been required to construct the steep and winding roadway which corkscrews round and round, down and down, circling under itself time after time, through the cañon which opens up immediately below and in front of us. The descent is constant for twelve miles through ever-changing scenery of forest-clad mountains. With Middle Creek for company, now alongside, now far below in the cañon, but always, because of the rapid fall, a plunging, roaring, foaming torrent.

"The tortuous winding of the roadway presents each scene in many different aspects, greatly enhancing its beauty, and never permitting one's interest to flag for an instant.

"There are no burned over tracts in the forests, there are no barren, rocky slopes; the road is lined with grass, and wild flowers grow in the greatest profusion and variety, and altogether the scene is constantly one not only of grandeur, but of intense beauty quite indescribable. Some of the wild flowers most noticeable for their beauty and abundant growth, were the white and red wild geraniums, the wild rose with its delicious perfume, the columbine, forget-me-nots, buttercup and bluebell, the monkey-face, one of the prettiest and most abundant, many varieties of wild aster, lupine and daisy, and many others which we could not identify, all of which were in bloom; no doubt the different months have their different flowers in keeping with the changing season.

"Down, down, down we drop until at last we reach the Government Station at the edge of the Park and enter the Shoshone National Forest, and just one



ON THE OLD CODY TRAIL.

and one-half miles beyond, Pahaska Tepee is reached after a drop of 2,000 feet from Sylvan Pass, almost 200 feet to the mile. A more picturesque situation than that of the Tepee at the confluence of Middle Creek and the North Fork of the Shoshone could be hardly imagined.

"Surrounded by lofty mountains, those south of the creek rising almost sheer to a height of over 10,000 feet, one might imagine the situation to be oppressive in its majesty and grandeur, and but for the forests of fir and spruce which cover the mountains, this might be so; as it is, the situation is one of soft and picturesque beauty seldom seen and difficult to imagine.

"The Tepee deserves more than passing mention. All the buildings are built entirely of logs carefully fitted together, and the rustic idea is carried out faithfully both within and without, as at Old Faithful Inn in the Park; and like in it, the living-room of Pahaska occupies an open space in the center of the hotel from floor to roof with balcony around and with a splendid stone fireplace and chimney at one end.

"Upon leaving Pahaska, much the same delightful prospect meets the eye on every hand, as that enjoyed the previous day; there is the same formal growth of evergreen forest, wild flowers in even greater variety and profusion, the same delicious ozone-laden atmosphere and similar snow-capped mountain peaks.

"All the way from Pahaska to Wapiti the mountain ridges are peculiarly regular in their north and south trend at right angles to the road, while between the ridges flow good-sized streams, those from the north and south emptying into the Shoshone almost always opposite each other.

"The descent is not quite so rapid and the valley somewhat more open, the individual peaks standing out with greater boldness, noticeably so with Buttriss Mountain on the left, first seen the previous afternoon and now in sight, off and on and for several hours; Double Mountain and Coxcomb Mountain on the right, all are good illustrations of the appropriateness with which the mountains in the region have been named. The buttriss, the doubleness of the second mountain and the resemblance to a cock's comb, are all plainly evident even were the names of these peaks unknown.

"The Shoshone has now become a broad river but is still boisterous with frequent foaming rapids. As we approach Wapiti, the valley occasionally widens, the quaking aspen, the first exception to the evergreen, is seen, the mountains become more irregular and the red sandstone of the nearby ridges commences to assume those curious and fantastic shapes which reach their climax on either side of Wapiti. One is reminded somewhat of the Garden of the Gods, but here the oddity of form and grouping is greatly exaggerated and covers a far more extensive area. No imagination is required to see various animals and castles and churches, domes, pinnacles and turrets, people singly and in groups, standing, running and lying down, in these peculiar formations; some of which have been appropriately named the Dead Indian, Castle Rock, the Holy City, Statuary Hill, Chimney Rock, the Clocktower, the Old Woman, Pinnacle Point, and so on *ad infinitum*. Finally Wapiti Inn is reached. The Inn is a frame structure and comfortable. The view looking down the valley in the direction of Cody is exquisite, especially toward sunset. At Wapiti and Pahaska we are in the center of the Big Game country, said by John Goff, President Roosevelt's famous guide, who makes his headquarters at Wapiti, to be the best big game country left in the United States today, outside of Alaska.

"After leaving Wapiti we pass the most fantastic of the peculiar rock formations including the Holy City on the left, the evergreens more and more give place to the aspen and the latter in turn to the willow, cottonwood and

sage-brush. Gradually the valley widens, Thousand Foot Cliff on the right is passed and shortly after the eastern border of the Shoshone National Forest, about ten miles from Wapiti, is crossed. This portion of the trip, and for a few miles beyond, is peculiarly picturesque and interesting in its own way, although quite different from the scenery further back. As the valley broadens and the mountains recede, giving place to fertile bench lands, irrigated farms commence to appear, and before long the road is winding along the edge of what in a short time will be the Government Shoshone Reservoir, an extensive lake to be formed by impounding the waters of the river for irrigation purposes. From here the last stage of the ride along the Government Road through Shoshone Cañon is thrillingly interesting, and shortly after passing the Shoshone Government dam, which seems like a long, narrow wedge driven down between the walls of the Cañon (it is the highest masonry dam in the world), Cody, the terminus of the Burlington Road, is reached, and our trip, through scenery unsurpassed on the continent for loveliness, is over."

From the Cañon Hotel there are the most interesting, most picturesque drives in the Park, or for that matter in the world. The splendid Government roads run down on both sides of the Grand Cañon very near the brink, so that there are very fine views of the great chasm. You cannot ride to the brink of the Falls, you must walk; there are steps and there's a trail. To reach the bed of the Cañon one must climb down and what is worse climb back, and only the more venturesome, and good climbers, should undertake it; these climbs and the one down the gulch to Red Rock are safe enough but fatiguing in the extreme.

Uncle Tom's ladders that made the trip to the foot of the Falls comparatively an easy matter are a thing of the past, as are the stairs that followed them; why they were abolished no one seems to know, but it is hoped that by the time this book is in the reader's hands they may be restored.

The route of the stages now returns directly west to Norris, thence north to Mammoth over the same road by which they entered on the Circuit Drive. The drive to Norris is through the forest with the Wedded Trees and Virginia Cascade and Cañon, up to Norris, thence the road is doubled to Mammoth and of course the scenes revisited. It is expected that the return via Dunraven Pass will be adopted in the near future.

THE MOUNT WASHBURN ROAD—The drive from the Cañon to the summit of Mount Washburn is not surpassed anywhere in the world for its magnificent grandeur of view, and the sensation of the up, up, up, all the time is fascinating. The direction is a little north of east in leaving the hotel, veering toward the due north as the ascent commences.

This is a joint road to Mount Washburn, Tower Falls, Yancey's and Mammoth as far as Dunraven Pass, where the Washburn road turns to right and immediately commences the ascent, zigzagging north and south with easy grades along the steep sides of the mountain, and at more than one place a stone might be thrown from one milepost to another. Speaking of mileposts in these pages, the word "milepost" will not be used every time, but the figures only, giving the numbers only; thus the first good view of the mountain begins at 10+1, means at one mile from the Cañon and ten from the summit, and the total distance is eleven miles.

The high peak towards the right of the road is Washburn, the other on the left is Dunraven. The road is smooth and well graded, with flowers and flowers on both sides of it; for six miles the drive is as one through some private park, and for awhile the trees, and little spots of meadows all



NEW ROADWAY AT GOLDEN GATE.

covered with wild flowers, almost make us forget the scenery to come just ahead.

At 6+5 we begin to get above the trees on the lower side of the road, and begin to turn about in our seats to look about over the grand panorama that is spreading out more and more with every turn of the wheels. Just below the road to the right the vapor from the Ink Pots is rising above the trees. Far away to the south fifty miles, old Mount Sheridan shows the snow on the summit, as the heights come into view before the lowlands.

At 5+6 we are nearing Dunraven on the west, and over to the eastward the Sleeping Giant rests in the Absaroka Range, with clear and distinct outline against the sky. Now look to the south and see beautiful Lake Yellowstone with its arms and thumbs in silver twists between the mountains, its nearest shores more than twenty miles and the farthest more than fifty miles away, and back of Mount Sheridan another fifty miles are the Tetons as clearly in the view as the Hayden Valley just below us.

At 4+7 we leave Dunraven Pass to the left, our road turning abruptly to the right and at once striking steeper grades, and the zigzag crooks and turns, with every one of which, the picture spreads to greater, grander scenes than in the other miles below us.

At 3+8 we come to the shorter, quicker turns in the road where the elbows are built on stone walls with protecting parapets. There's snow along here, higher than our wagon tops on the upper side of the road; it has been shoveled off the roadbed down the lower side, where it lies slowly melting under a summer sun. Now look to the northwest; there's Electric Peak that is away on the other side of Mammoth Hot Springs.

Just before 2+9 is the second walled elbow where the road turns northward for a little ways. Now look right down the mountain-side. There is another wagon that left the Cañon some minutes after we did; we can hear their voices and yet there's a mile of road between us. And look again further down the mountain and across to the other hillside; there are the white-covered wagons of some campers that may follow us up here or go on to Tower Falls.

Now we have passed the third rock-built turn; the summit seems right here above us. There are some people waving to us but we still wind about between the mileposts; they keep on peeping out along the roadside, one after another; there's one more yet to come and still we can hear voices from the summit.

We have passed 1+10 and directly we come to a walled way, the heavy parapets on the lower, and the solid rocks of Washburn on the upper side of the road; in a moment more and we have gone completely around the pointed peak and our wagon rolls gently into the walled circle of the crest of Mount Washburn. Surely this is the top o' the world. Look about you! The grandeur of it takes your breath and speech away.

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* * * * *

These little * * * represent, with a million more, that which your lips positively refuse to utter.

Looking over the south side of the summit wall with the sweep of the vision from west to east, the little speck of red is the Cañon Hotel in a little yard of meadows; the little red gully is the Grand Cañon with two very small, white spots for the Falls. That silver ribbon glistening in the sunshine is the lovely Yellowstone River, and way over there is the Lake, seeming little larger than the hand it resembles; beyond it Sheridan and the Tetons. On the left and to the east all the peaks of great Absaroka are in line, great giants in battle array keeping guard over this Wonderland, a mighty evidence of God's own handiwork.

What we can see of the Grand Cañon in the ride along its brink near the hotel is only a little part of it. From the summit of this mighty mountain there are miles and miles of the chasm in the views that the casual traveler never sees.

The view from the north wall shows little mountains and big mountains, range

after range, and around to the northwest great Electric Peak lifts a snowy head high above them all, with Bunsen Peak, Mount Everts and the others all in the view, scores of them too numerous to mention.

We can see the road far below us as it runs north from Dunraven Pass to Tower Falls, and there are the cliffs of Tower Falls Creek, forming another wonderful cañon. The meadows in the valley are dotted with trees, but on the mountain-sides and tops there is snow, snow in every direction, from little patches in the gulches to great fields of snowy whiteness where the shadows of the mountain shut off the summer sunshine that would melt them away.

On the north side of Washburn there is a field of snow of many acres, cov-



BILLIE HOFER'S BOATS.

ered to a depth of fifteen to twenty feet. This field is not more than a quarter of a mile from where we stand on the summit; sometimes it covers the road that is on that side going down to Tower Falls, and a cut must be made through the snow. We saw some campers leaving the summit as we arrived. They had sent two girls to reconnoiter the snow-field; in a few moments they signaled for the wagons to come on, and for a little while the whole caravan was hid from view, and although we were two hundred feet above them we could not see the tops of their covered wagons nor the girls on horseback, and yet where we stood there was not a flake of snow, but all about were some little red, white and blue flowers. No other colors, they say, grow here on this mountain-top.

And now we can think about it in a practical way, about this wonderful road that taxed engineering genius to make it so safe a way and so perfect a thoroughfare. The same bright mind that gave us the road did not leave us to stumble about over the rocks at the top; he just cut off that top and leveled it as smooth as a table, and it reminds you of a round table, a very large table, with a stout wall of stones all around its circle. In the center of this circle is a mound of rocks surrounded by an iron rail: this is the tiptop peak of Mount Washburn, left as Nature formed it, and don't you try to take even one little pebble away; that's what the iron rail was put there for, to prevent the depredations of the relic hunter. Other little pebbles may be picked up anywhere, and they will do just as well, for the relic hunter's story is not always implicitly believed, and the pebble from the side of Mount Washburn can pose as the one from the top, then the peak will endure intact for those who come after.

If the panorama grew upon us as we came up, it is all spread out now from one sky line of mountains to the other all around—a vast unpaintable, indescribable picture. And now as we are about to descend, the book of views begins to close, and leaf by leaf shuts out one and another page till almost they are all gone. The mountains are above us again, the trees cast their shadows athwart the road, and the flowers brush against our wheels.

Your pleasure has been enhanced by this magnificent drive, and with that thoughtfulness that seems to pervade every man's work in the Park, the places for public comfort are here provided.

The wheels roll rapidly down the hill, the mileposts are put behind more quickly, and we are back in the gardens again to gather an armful of flowers for our dinner decoration.

THE TOWER FALLS ROAD—From the Cañon to Mammoth by way of Tower Falls and Yancey's the road is the same as that to Mount Washburn as far as Dunraven Pass, thence on through the Pass around the western slopes of the peak and the mountain. At the Pass one may turn to the right and go over the top of Washburn, but the easiest way is through the Pass on a gentle down grade through patches of meadow and long stretches of forest to Tower Falls, one of the very prettiest of all the cascades in all the Park.

Tower Falls is well named, as it was by a vote of the members of the first expedition to see its beauties from the numerous towers and pinnacles around about the cañon where the Falls are. Near by is the lower end of the Grand Cañon of the Yellowstone, not so high, not so wide, and not so deep as at the Falls, but with perpendicular cliffs of more than five hundred feet. The Needle, as it is called, is a slender rock nearly three hundred feet high.

Near the mouth of Tower Creek is the ford where John Colter, the discoverer, crossed the Yellowstone River over a hundred years ago. Baronett Bridge was built by Jack Baronett in 1871, partly destroyed by the Nez Percés in 1877, but rebuilt in 1880. Yancey's has been heard about ever since we began to hear about the Park; Uncle John Yancey lived here for many years, and always held out the glad hand of welcome to the venture-some travelers who came his way.

Lost Creek Falls is a half mile from the road, but well worth the time it takes for a visit.

The Petrified Trees are hereabouts, but the so-called petrified forests are farther to the eastward and not to be seen from the main road; it is necessary to stop over to see these wonders, and those other attractions, Soda Butte, Lamar Cañon, Death Gulch and the real Hoodoos of Miller Creek. The road from Tower Falls to Mammoth is of the average of the other Park drives, with new and different views in every mile. After passing through

Crescent Hill Cañon there are fine views of Electric Peak, Mount Everts and Bunsen; thence it is down grade to the bridge over the Gardiner and the ride of another hour to Mammoth.

DRIVERS—On the drive through the Yellowstone Park the driver must be your guide, interpreter and friend, obliging, not to the extent of being obtrusive, but if you have not asked the question of some attraction that you are passing he will call your attention to it, and pleasantly give you its story that you would have missed but for his courtesy.

The drivers are not all old-timers of the Park, but very many of them have been there for many seasons, and some of them since the opening of the first one. The new drivers learn quickly and in half a dozen trips are sufficiently posted to answer all but the most intricate questions; they learn from observation and from association with the older men; they make a study of their work because it is to their interest to know the road and all about it.

Drivers are selected by the management, first for their experience in driving, their knowledge of horses and wagons, and their sobriety and good judgment. Some men have had their earlier experience in the barns, some have driven "freighters," then surreys and formation wagons before they are given a four-horse team, and it's a top-notcher that handles the ribbons over a six-horse tallyho.

It will be a study for you, if you are fortunate enough to have a seat beside the driver, to see how he handles his team and himself. He sits erect, alert all the time, his right hand and shoulder slightly forward, his right foot on the edge of the boot ready to touch the brake on the slightest emergency.

The reins are grasped firmly, passing between the fingers and over the thumb. He has his hands full, but see how he carries his whip; he don't hold it, yet it is always in his hand, just resting under the thumb lightly as if it was a cane. If you tried to do it you would drop the whip a dozen times in a mile. Every driver owns his whip and oftentimes he made it. Good stage whips are not found in stores; it is his pet and pride and is oft covered with silver bands and pleasant memories. I know one driver who cut his hickory, prepared his lash and mined the silver for the bands. Where the driver goes there goes his whip also; from the Yosemite to the Yellowstone down and back again, they are inseparable companions.

While on duty all drivers look alike to me, their clean linen dusters with silk handkerchief about the neck, and a stiff brim soft hat creased in the crown to a point with four sides, the light colored hat to match the duster and not show the dust. I can't tell them apart up the road, but he is a picturesque figure, courteous and polite, and my friend always.



Practical Matters

ROUTES—Two of the great Transcontinental Lines of railway pass near the Yellowstone Park and with their branches touch its boundaries.

The Northern Pacific Railway with its branch south from Livingston to Gardiner, Montana, reaches the North Gate, and during the Park season operates through Pullmans from St. Paul and from Seattle direct to the Park.

The Union Pacific Railway with its connection, the Oregon Short Line, at Ogden and Pocatello, reaches the West Gate at Yellowstone, Montana, and during the Park season operates through Pullmans from Salt Lake, Ogden and Pocatello to Yellowstone.

The Denver & Rio Grande and the Colorado Midland also connect with the Oregon Short Line for the West Gate.

The Burlington Route from Omaha and Denver connects at Billings with the Northern Pacific for the North Gate, with through Pullmans to Livingston. The Burlington also has a route by way of a branch line from Toluca to Cody, Wyoming, thence through the East Gate, but at this writing this route has no stage connection.

The Cody Route to Yellowstone Park is especially a route for camping parties, but it is not generally known that the trip may be made in parties of two or more in conveyances similar to those used in the Park, stopping over night in comfortable quarters at Pahaska and Wapiti.

Unless one wishes to make the trip via Cody in both directions, the best way is to go in via Gardiner and make the regular Park tour via Mammoth Hot Springs, Norris, Lower and Upper Geyser Basins and the Lake to the Grand Cañon; but on the last day, instead of leaving the Cañon in the morning to return to Gardiner, leave there in the afternoon and return to the Lake Hotel, stay there all night and start over the Cody Road after breakfast. This gives one some extra time, always much desired at the Cañon.

Transportation from Lake Hotel to Cody should be arranged well in advance through L. E. Decker, Cody, Wyoming, if one wishes the special rate including stop at Pahaska, or through Mr. Decker or Aron Holm, Cody, if transportation only is desired. Mr. Decker is manager for the hotels of Colonel Cody (Buffalo Bill) at Cody, Wapiti and Pahaska, and Mr. Holm is the well-known camp outfitter who has taken so many camping parties through the Park.

TICKETS—During the Park season all prominent railways sell round-trip tickets to the Yellowstone Park, going and returning same way, or by diverse routes, going one line and returning another; and on transcontinental tickets it is usual to grant stop-over privileges at Livingston, Salt Lake, Ogden, Pocatello and Toluca within the limit of such tickets. At Livingston, Salt Lake, Ogden and Pocatello, side-trip tickets to the Park are sold. Tickets to the Yellowstone Park may or may not include stage fares and hotel charges, as may be preferred by the traveler.

The 5 1-2 day ticket from Livingston, entering the Park at Gardiner, allows time for the Circuit Drive of the Park with stop-overs one night at each hotel.

The 5-day ticket from Yellowstone makes the Park circuit, stopping every night; the 4-day ticket does not include Mammoth Hotel Springs; the 2-day

ticket includes Lower and Upper Basins only. Stop-over privileges are granted by the stage companies on notification to their agents at any of the hotels of the Park. Care should be taken not to over-stay the limit of railway tickets.

On arrival at Mammoth Hot Springs or Yellowstone, railway tickets must be presented to stage agents and hotel managers, in order that coupons may be taken up, places on stages and rooms assigned, and stage and hotel tickets issued. This is important. Return portions of round-trip tickets must be validated at Mammoth Hot Springs or Yellowstone. Sleeping-car tickets for return trip should be arranged for on arrival.

Tickets entering at the North Gate and leaving by West Gate must have the stage coupon exchanged at Mammoth, as passengers use Transportation



HIS DINNER A LA CARTE.

Company's stage around the Park and return to Norris, where they change to the M-Y stage for Yellowstone.

BAGGAGE—The usual regulation of the railways of the United States, 150 pounds of baggage to each first-class ticket, applies of course to Yellowstone Park travelers up to the North Gate at Gardiner, the West Gate at Yellowstone and to Cody, all baggage should be checked to those points.

Trunks or other heavy baggage cannot be taken on stages and can only be taken up the Park as freight by special arrangement. Trunks will be checked from Gardiner to Mammoth Hot Springs Hotel; a regular tariff covering this service is in effect. Travelers are allowed a suit case or hand

bag, each person, which may be packed for the drive at Mammoth or Yellowstone, and repacked at those points after the drive, as trunks remain in custody of the stage companies at those points. A small hand bag of toilet articles is of course permitted on stages.

Holders of diverse route tickets, going in at one gate and out the other, may have their trunks checked from the entrance gate to the exit by rail around the corner of the Park; for instance, one entering at the North Gate may have baggage checked free from Gardiner to Yellowstone, and if entrance is made at the West Gate, check from Yellowstone to Gardiner. Storage charges at Yellowstone and Gardiner are waived during the ordinary Park trip. Suit cases and hand bags are carried on stages in the front and rear boots and under the seats.

STAGES—The Yellowstone Park Transportation Company operates tallyhos and stages from the North Gate at Gardiner to Mammoth Hot Springs and thence around the Park. The equipment is painted in bright yellow. Coaches are numbered and bear the name of the company. This company is familiarly known as "the Transportation Company."

The Monida and Yellowstone Stage Company operates from the West Gate at Yellowstone to Fountain Hotel, thence around the Park. Equipment painted in dark maroon. Coaches are named and bear the company's name. Familiarly called the "Monida" or "M-Y" line.

Together these two companies own and operate the very finest equipment of stages with the best horses of any transportation corporation in the world.

The Wylie Camping Company owns and operates its own coaches.

The wheel equipment of all the companies consists of the great Tallyhos of the Transportation Company from Gardiner to Mammoth, capacity twenty to thirty-four people, and vehicles of all companies of various sizes, Stages, Formation Wagons, Mountain Wagons, Spring Wagons and Surreys, seating 11, 9, 7, 5 and 3 persons each.

Seats on stages are not reserved and there is little preference except that nearly every one wants to sit with the driver, until a shower comes up. Custom has about established the rule that the seat chosen at the start is your seat for the entire trip, though for the most part the amiable traveler will exchange from time to time if it is desired, and it is always the good part to alternate the driver's seat.

Seats are long enough to seat three persons comfortably, in fact they are more comfortable than if only two persons are on one seat. Two persons may ride with the driver on almost all of the stages. The stage lines are under the management of Superintendents and Assistants at Mammoth and Yellowstone, with Transportation and M-Y Agents at each hotel.

ROADS—The roads in the Yellowstone Park are good, in all that word implies; they were laid out by Government survey and are maintained, sprinkled, ballasted by the United States Government through Congressional appropriations. The roads from Gardiner to Mammoth, from Yellowstone to the Fountain, from the border of the Forest Reserve on the Cody Road, the Circuit Drive, and the road over Mount Washburn to Tower Falls and back to Mammoth, and both sides of the Cañon are all known as Government roads and are under that maintenance. The Circuit roads are sprinkled daily during the Park season, in all districts where water is obtainable, and there is only one stretch of five or six miles where water is not possible at this writing, so the former bugbear of dust is reduced to a minimum.

The side roads and trails to points of interest of the main drive are maintained by those in interest, and are for the most part good roads, without being surfaced or ballasted. In time as Congress wakes up to its full

duty to this Park "for the benefit and enjoyment of the people," all the roads in the Park and the approaches thereto will be under Government maintenance. All the roads, trails and by-paths are *free* to all who may choose to use them; no tolls are required and the general taxpayer has paid his road tax in the Yellowstone Park.

HOTELS—All the hotels in the Yellowstone Park belong to and are operated by the Yellowstone Park Association, a corporation organized under the law, and are under the management of its officers. The hotels are built on grounds leased by the Yellowstone Park Association from the United States, but the Government has nothing to do with the details of management except wherein they come under the general supervision as in the maintenance of a high standard, regulation of prices, etc. The office is at Mammoth Hot Springs where the Superintendent of Hotels makes his headquarters. Each hotel is under the direction of a Manager who, with his staff of clerks, chefs, etc., reports to the Superintendent.

Reservation of rooms should be mailed or wired to Mammoth Hot Springs and should give date of arrival at Mammoth or Yellowstone with proposed itinerary of the trip through the Park, that the reservations may be made at each hotel. Number of persons and their relation to each other, married or single, should be given, in order that they may be properly roomed.

A high standard of excellence is maintained in the management of all the Park hotels, and it is a matter of surprise that such is the case when the fact that the Park is over a thousand miles from suitable markets and that vegetables, fruits, etc., cannot be produced in sufficient quantities in the vicinity.

The rooms are commodious and well ventilated, there are electric lights and steam heat, as the latter is often needed in the evenings and mornings even in midsummer, and in the lobbies of Old Faithful Inn and the Fountain Hotel there are great fireplaces for log fires every evening.

SADDLE HORSES may be obtained from the agents of the Transportation Company at nearly all the hotels, also light rigs for drives.

CAMPS—The Wylie Permanent Camping Company has established camps and lunch stations, located as follows: Swan Lake, Gibbon Cañon, Upper Basin, Riverside, Thumb Bay, Lake, Cañon and Tower Falls.

The tent equipment is good; there are separate rooms in wood-floored tents, beds, etc., and a general dining-room tent. The Wylie transportation outfit is operated on a regular schedule commencing and ending at the North Gate, Gardiner, Montana, making the circuit of the Park in six days. The stage equipment consists of coaches, surreys and spring wagons. Altogether the Wylie Company offers the most comfortable camping way, combining the pleasures of out-door life with the little inconveniences reduced to a minimum. The headquarters of the Wylie Company are at Gardiner from June to October, the balance of the year at Livingston, Montana.

Other camping companies have their headquarters at Livingston, Gardiner, Yellowstone and Cody. These companies do not have permanent locations but pitch their tents where there may be wood and water along their route, carrying tents, cooking utensils, etc., from place to place and stopping one day or two, or more as may be desired; this is camping in the truest sense of the word.

The Yellowstone Park Camping and Transportation Company of Cody, Wyoming, conducts camping tours from Cody over the Cody Road, through the Shoshone National Forest to the Lake Hotel, thence through the Park and return to Cody, or ending at Gardiner or Yellowstone, in any case covering all points of interest in the Park, and lasting ten to twenty days. This

company has the best equipment, a long experience and the hearty commendation of numerous successfully conducted parties.

All these companies will furnish horses and ponies for those who prefer the cavalry.

The Bryant-Spence Yellowstone Camping Company has an established reputation, gained through six years' service, for the completeness and excellence of camp equipment, the good quality of the table and service, the thoroughness of the sightseeing.

The Bryant-Spence Company has its offices in the Monadnock Building, Chicago, with camp headquarters at Yellowstone, Montana, where all tours start. Special arrangements may be made to start from Gardiner, North Gate.

The camps are movable, not permanent; each day, as the party travels, camp is broken in the morning and made at another point in the afternoon.



IN THE NORTHERN PACIFIC STATION GARDINER—ENTRANCE YELLOWSTONE PARK.

Comfortable coaches and saddle horses are provided for the members of the parties.

Special wagons carry provisions, baggage, tents, cots, blankets, tables, chairs, stoves, everything to make camp life comfortable. A professional cook accompanies each party, and abundant help to do all the camp work.

LETTERS AND TELEGRAMS—Mail should be addressed care Mammoth Hot Springs Hotel, Yellowstone Park, Wyoming, and if desired that letters should be sent up the Park, leave the necessary instructions with the mail clerk in the hotel. A mail bag is sent out by stage every morning, and an "express" usually on alternate days. The same rule applies if the West Gate is used, except that mail should be addressed care M-Y Company.

Remember! the North Gate postoffice is Yellowstone Park, Wyoming. Mail may be deposited at any of the hotels or lunch stations and it will be

forwarded by the first stage or "express" to the mail trains at the North Gate. Telegrams should be addressed to Yellowstone Park, Wyoming, and if proper instructions are given, message will be repeated to any hotel or lunch station in the Park. The Yellowstone Park Association owns and operates a telegraph line which connects with Western Union wires at Gardiner, over which messages may be sent to, or received from, all parts of the world. Telegraph offices are in each hotel and lunch station.

WHAT TO WEAR—Such clothing as is ordinarily worn in early spring and late fall is the proper weight for the climate of the Yellowstone Park, where the days are moderately warm and the evenings and mornings cool to chilly. Light overcoats and wraps are necessary. A traveling suit for the stages and a change for the hotels is advised, both for ladies and gentlemen, as there is more or less dressing for dinner, evening concerts or dancing. Ladies should take silk and shirt waists with suitable skirts for evening and day wear, such as may be packed in a suit case. Thick-soled walking shoes for going about on the formations are advised; rubbers are not absolutely necessary. Dusters may be hired for the trip at Mammoth or Yellowstone. Raincoats are rarely needed, as coaches have curtains. Umbrellas should be taken for sun or rain. Blankets are placed in each stage for cold snaps that may occur.

BOATS—A very pretty little fleet of steamers and gasoline launches navigates the Yellowstone Lake for the accommodation of pleasure seekers, fishermen and travelers. Boats are in readiness at the Thumb Lunch Station to convey those who prefer the voyage to the further stage ride to the Lake Hotel.

These boats are under the management of the T. E. Hofer Boat Company which charges a stipulated price for the trip as authorized by the Secretary of the Interior. The boat proposition is independent of the stage lines and the boat charges are not a part of the circuit ticket.

A complete outfit of small launches, rowboats, etc., is maintained at the Lake.

STORES—There are stores at Gardiner, Yellowstone, Cody, Mammoth, Upper Basin, and the Lake, where all small needs may be supplied; cameras, films, witch hazel, cold cream, curios, collars, cuffs, post cards, gloves, hats, dusters, camp supplies, hay and grain, fishing tackle, and a hundred things too numerous to write down. There are news and curio stands in hotels, daily papers, magazines, cigars, pipes, etc. The store of H. E. Klammer is unique in its architecture, being ornamented in rustic style after the manner of Old Faithful Inn.

CAMPS—As the roads are free, so are the camp-grounds to all who may come to use them, with no other restrictions than the rules and regulations as set down by the Park Superintendent, that they must not be nearer the road than one hundred feet, camps kept clean and fires extinguished, etc., all tending to comfort and safety. Fallen timber may be freely used for fuel, the grass as feed for stock, and the water free as the air, and there is an abundance everywhere.

Along the road there are signboards directing to the good camps, and there are other signs indicating where camps are not permitted; besides the signs, the rules and regulations printed on cloth are posted all along the road. Campers are required to register at the first military post after entering the Park, and at each patrol station, and again at departure. Thus if entrance is made by the North Gate, at Gardiner, the first registration must be made at Fort Yellowstone, Mammoth Hot Springs, and entering by the West Gate register at Riverside station. And entering at the East Gate over the Cody

Road, registration must be made at the Government Station just at the eastern edge of the Park.

Commencing at the North Gate the camps may be enumerated as follows, in their order around the circuit:

Near the formations and terraces on the south side of the road and about a mile south of Mammoth Hot Springs.

Willow Creek and Gardiner River camps are about five miles south of the Golden Gate.

Apollinaris Spring is about ten miles from Mammoth; the camp is on the west of the road.

The next camp sign is four miles further on, with the usual information to "good camp water and grass."

Just east of the Norris patrol station, and near the junction of the Cañon and Fountain roads, is the nearest camp for Norris Basin, and there's trout in the Gibbon River.

South of Norris Basin, on the border of Gibbon Meadows, about four miles, are camping places on both sides of the road, just at the entrance to Gibbon Cañon. Near by are the Gibbon Paint Pots.

The next camps are along the Fire Hole River, between the junction of the road from the West Gate and the Nez Percé Creek, and for those entering by the West Gate there is a good camp at the junction of the Fire Hole and Madison rivers. Camping is not allowed between Nez Percé Creek and the south border of the Lower Basin.

South of Excelsior Geyser about a mile is the next camp, with all requisites of feed, fuel and fresh water, and the next at Biscuit Basin, two miles north of the Upper Basin.

The camp in the edge of the forest at the Riverside Geyser is the most convenient one for the Upper Basin, as there are no camp grounds between the bridge at Riverside Geyser and Old Faithful.

After entering the forest just south of Old Faithful there is a camp on the east side of the road, on the banks of the Fire Hole River.

The camp at Lone Star Geyser is a good one; it is reached by leaving the Circuit Road three miles east of Old Faithful, half mile south.

There are only two camping places between Lone Star and Thumb Bay, one on West De Lacy Creek eight miles east of the Upper Basin, the other a mile beyond, to the eastward, also on a fork of De Lacy Creek.

The camp grounds at Thumb Bay are on the banks of a creek and near the Lake, just south of the Lunch Station.

Going east from Thumb Bay on the Circuit Road it is nearly fourteen miles to the next camp, and three miles further on is another near the Lake shore; both have all the requisites and the Lake lots of fish. The latter camp is just east of Bridge Bay and Natural Bridge.

Near the outlet of Lake Yellowstone is a fine camp, and with all the rest of it here is the finest fishing waters in the world.

Leaving the Circuit Road about a mile east of Lake Hotel there is a bridge over the Yellowstone River over which the Cody Road passes. The camps along the Cody Road need not be mentioned here in detail; suffice it to say they are frequent, with plenty of fuel and good water and invariably delightfully located. A complete description of this route is found in another chapter.

All along the Yellowstone River and within sight of the Circuit Road are good camping places, one near the Mud Geyser, others by the rapids above the Upper Falls, and nearer the Grand Cañon at the junction of the Cañon road. Camping is not allowed east of Cascade Creek.

On the south side of the Grand Cañon, about half mile east of the bridge over the river, is a fine camp, convenient for the descent to the bottom of Cañon at the Lower Falls.

Going west from Cañon, the next camps are near the headwaters of the Gibbon and the junction of the Circuit Road to Norris and Mammoth. The camps north to Mammoth are enumerated in the first paragraph.

Passing north from the Cañon via Dunraven Pass and Mount Washburn, there are good camps all along the road, there being no more than the ordinary restrictions. At Tower Falls and Yancey's there are the attractions of the Falls, Cañon and Petrified Trees.

MILEPOSTS—The United States Engineer Corps, after building the Circuit Road, carefully measured it and placed a post at the end of each mile. These posts are painted white, and in black letters and figures indicate the altitude of the identical spot on which the post stands; and on one side the initials of and the distance to the point you are approaching, on the other the initials of and the number of miles to that which have been left behind. The two numbers added together give the total length of the section over which the traveler is passing, as going south from Mammoth the milepost near Golden Gate says on one side, N. B. 16, on the other M. S. 4; these two added gives 20, the number of miles from Mammoth Hotel to Norris Basin.

In other chapters of this book the mileposts are referred to by giving the numbers on both sides thus, 16+4, 19+1, and so on.

The initials on the mileposts are as follows:

G C—Gardiner City.
M S—Mammoth Springs.
N B—Norris Basin.
R S—Riverside Station.
F H—Fountain Hotel.
U B—Upper Basin.
W T—West Thumb.
L H—Lake Hotel.
C J—Cañon Junction.
T F—Tower Falls.

So all the little details of information are to be had without even the asking, and this is only one of the very many things that are done in the Park "for the benefit and enjoyment of the people."

THE PARK SEASON is during the months of June, July, August and September, usually commencing from the 10th to the 15th of June and ending on the 15th to the 20th of September, the last stage leaving the North and West Gates on that date. The Fountain Hotel closes after breakfast on the 16th; Old Faithful Inn after breakfast on the 17th; Thumb Lunch Station on the 17th; Lake Hotel after breakfast on the 18th; Cañon Hotel after breakfast on the 19th; Norris Lunch Station on the 19th, and Mammoth Hotel after dinner on the 20th. This is the usual rule, but dates may be changed without notice.

FISHING—There is no closed season for fishing in the Park; one may fish anywhere at any time. A regulation of the Superintendent provides against the taking of more than twenty-five fish by one person at one sitting; the only place in the world where such a restriction is necessary. Tackle may be found at all the hotels and stores in the Park.

Wild Animals and Birds

The woods are full of them, but there is no "game" in the Park. If there is one rule that is enforced strictly and absolutely it is that which prohibits shooting or in any way interfering with the wild animals and birds of the Yellowstone Park. Any infringement of this law is punishable by fine or imprisonment, or both, and it is almost always both.

The bears are a close second to the geyser in attraction. If a geyser is about to play and the bears are announced as at the feeding place in the rear of the hotel at the same moment, it is an even guess as to which will have the larger audience. They, the bears, have a peculiar fascination for the people, and even after a day's ride or a tramp over the formation, they will go and go again to watch Bruin and his family at dinner. There are bears at every hotel and camp and along the road, harmlessly inoffensive, but hungry always, so that they almost climb into the garbage carts, and I have seen them fed from the stages with candies and chocolates, which is against the rule. When a girl gives up her chocolate creams to a bear, he's a dear.

The bears are of all varieties from huge and shaggy Grizzly to the little runt of a Cinnamon, the black bear and the brown, and the Silver Tip; and the cubs, most always twins and sometimes triplets, shy and mother loving they are, often under her shadow or up a tree when they would really prefer to be on the level wrestling with a tomato can. Seton Thompson's story of the cub with a tin can fastened on his foot while he grew and grew is most likely true. It is known that a cub got one of his fore paws and head through an iron hoop of a pail or keg, was unable to release himself and finally suffered so that he had to be shot.

There have never been any casualties from bears; even when almost starving they are rarely vicious and never attack any one who does not molest them.

Deer are seen from almost every passing stage, quietly feeding, or resting in the shade of the trees. Elk are not quite so fearless, but they are to be seen in great herds numbering into hundreds, always distant from the road, mostly in the Hayden Valley or on the hills beyond the river and on the slope of the foothills about Mount Washburn.

The few wild buffalo that were left in the Park have long since disappeared and those in captivity have been removed to Lamar Valley where there is a corral better adapted to their well being, and for breeding, to prevent the imminent extinction of this noble animal; only about twenty-five buffaloes could be counted in the Park in 1907.

The report of Gen S. B. M. Young, Superintendent of the Yellowstone Park, 1907, says:

"Small bands of antelopes are reported in the Pelican Valley, Hayden Valley, and on meadows bordering the Yellowstone between the Lake and Upper Falls. With these and the year's crop of fawns there may be approximately 2,000 antelope in the Park.

The number of elk in the Park is estimated by persons of some experience at 40,000. From personal observation and information received from reliable scouts, also the daily reports of patrols and guards, 25,000 seems to be a safe estimate.

Mountain sheep, whitetail and blacktail deer are increasing in numbers and growing less wild. Mr. McBride, the chief (and the oldest) scout, gives the following estimate on numbers of these animals in the Park: Mountain sheep, 200; Whitetail deer, 100; Blacktail deer, 1,000.

Moose seem to have increased. The greatest number appear to be in the marshes and willows of the Upper Yellowstone, in the southeast corner of Park; others are in the southwest corner on Bechler River, and a few in Gallatin Basin, in the northwest corner of Park.

The mountain lions have been almost exterminated. The tracks of only one in the snow was reported last winter, and again during the summer in the same region. The records show that 62 of these animals were destroyed during the winters of 1903-4, 1904-5 and 1905-6.

Coyotes are numerous and very destructive to the antelope, young and old. The records show that 99 have been destroyed during the past year



ELECTRIC PEAK, YELLOWSTONE PARK.

by the scouts and station guards. The majority of this number were trapped, some were poisoned, and others shot.

Foxes, badgers, marmots, the Fremont tree squirrels, and three varieties of chipmunks are plentiful. Beaver are abundant throughout the Park. Martin, mink, otter and muskrats are plentiful.

Of rabbits we have the common hare, jack rabbit, Rocky Mountain hare (snowshoe rabbit), and chief hare (pika). The two latter are plentiful."

BIRDS—To quote again from General Young's very interesting report:

"Large numbers of the Canada geese have reared their young in the Park and showed little fear of molestation by visitors. Also ducks of many varieties. Pelicans and gulls occupy the entire surface of one small island in Yellowstone Lake as their nursery. More than 70 species of birds come to the Park to rear their young, but many of the song birds and others that generally nest as near the human habitations are annually destroyed by the house cats. For this reason cats as well as dogs will not hereafter be permitted in the Park.

I am much indebted to Dr. T. S. Palmer of the Biological Survey, in charge of game preservation, Agricultural Department, who spent some days in the Park during this season and on my request kindly prepared the following:

"Visitors to the Yellowstone National Park are apt to gain the impression that birds are few both in number of species and individuals. Their attention is only occasionally directed to the birds along the route and is absorbed by the geysers, hot springs, and other objects of interest which constantly excite their wonder and admiration. Moreover, tourists who take the regular trip, stopping each night at one of the hotels of the Yellowstone Park Association, or who follow the same general route under the guidance of a Camping Company, find the programme for each day already planned and the time too short to see even the chief points of interest. Five or six days or two weeks are entirely inadequate for gaining a general acquaintance with the fauna of a region comprising more than 3,000 square miles, greater in area than the States of Delaware and Rhode Island, and approximately one-tenth the size of the State of Maine. The brief stops at the hotels or camps and the long rides through the extensive forests on the plateau of the Park, where conditions are not favorable for variety of bird life, also afford insufficient opportunities for making many observations.

The more conspicuous species ordinarily seen by the tourist are included to a certain extent in a list of names of birds which have been used to designate certain points of geographic interest. A little search, however, will bring to light a number of other less conspicuous but not less interesting birds, and fifty or more species can readily be found along the regular tourist route.

Unusually favorable opportunities are afforded for observing certain phases of bird life. Especially is this true of the raptorial birds, such as the eagles, hawks and owls, represented by nine or ten species, which, under the rigid protection accorded them may be seen in greater numbers and at closer range than in most parts of the country. Unrivalled opportunities are afforded for studying the nesting and feeding habits of the osprey or fish hawk in the cañons of the Gardiner and Yellowstone rivers. Marsh hawks, sparrow hawks and the other species may also be observed at numerous points along the route. The destruction of the smaller birds which find shelter in the Stygian and other caves on the "Formation" back of Mammoth Hot Springs, furnishes a means of noting in a general way the progress of the migration, and a visit to these caves will usually be rewarded by finding one or more species which have sought shelter in the crevices of the rock during cold nights and have been overcome by the gases.

Although unable to estimate the number of birds that perished in the caves adjacent to the Mammoth Hot Springs during the past season (1902), I am of the opinion that the number reached into the hundreds, if not thousands. Birds were found dead in about thirty different caves and hollows about the "Formation" between Snow Pass and the Mammoth Hot Springs Hotel, near which latter the lowest bird cave was discovered.

The following named birds are found in the Yellowstone Park: Pied-billed grebe, Ring-billed gull, Black tern, White pelican, Mallard, Blue-winged teal, Woodduck, Canada goose, Great Blue heron, Wilson snipe, Sandpiper, Killdeer, Dusky grouse, Mourning dove, Marsh hawk, Golden eagle, Bald eagle, Duck hawk, Fishhawk, Owl, Kingfisher, Woodpecker, Red Shafted flicker, Night hawk, White-throated swift, Hummingbird, Kingbird, Flycatcher, Lark, Magpie, Jay, Raven, Crow, Meadowlark, Blackbird, Goldfinch, Sparrow, Cliff swallow, Yellow warbler, Audubon warbler, Wren, Chickadee, Thrush, Robin, Bluebird."

FISH—The Yellowstone Park is "ne plus ultra," the "ultima thule" and "e pluribus unum," and all the rest of it for fish and fishing, and "there's millions in it" to be taken out by holding a rod over the water with a poor little imitation fly on the hook at the end of the line. The fish don't even get a feed for his bite before he is gasping for breath in the boat or on shore.

No other place in the world is subject to military regulation as to the number that may be taken by one person at one "go-in-a-fishin." Here twenty-five is the limit, then you must go home and start out again for another twenty-five. This was the result of a catch from Wednesday at 4 p. m. till Thursday evening at five, by a party of seven gentlemen from Cincinnati, in July, 1903. They brought to the Lake Hotel 1,876 trout, taken from the lake outlet; the



ANGEL TERRACE.

weight total was estimated at 1,407 pounds, and if placed head to tail would cover a distance of nearly a third of a mile.

Fish stories of Lake Yellowstone may be taken at their face value; the biggest one never gets away, because they, the fish, are all about the same size, and it is useless to lie about the number caught because the truth is enough and more than twenty-five means the jail.

When this catch was reported in the Associate Press Dispatches, the Park Superintendent, Major Pitcher, issued an order limiting the catch of each person to twenty-five fish.

You may fish and fish and fail in any other part of the world, but to the Yellowstone fisher there is no such word as "fail." As the advertisements sometimes say, "previous experience not necessary," it is so when you come to

fishing in the outlet of Yellowstone Lake. Old men and women, young men and maidens, and even little children catch fish here. The old sport cries out, "It's too easy," and hies him away to the trout streams where it is more to his liking. He'd rather come home with a half dozen that he had to fight for, regardless of the fact that the fish in the Lake are game enough.

The origin of the fish in the Yellowstone Lake has been a matter of some speculation. Chittenden in his admirable work, "The Yellowstone Park," says:

"Not all the streams of the Park were originally stocked with fish. Where the waters leave the great volcanic plateau and fall to the underlying formations, the cataracts form impassable barriers to the ascent of fish. In the lower courses of all the streams there were native trout, but above the falls, with one exception, there were none. The exception of the Yellowstone River and Lake is a most interesting one. Why the Falls of the Yellowstone, the highest and most impassable of all, should apparently have proven no barrier, is at first a puzzling question. But the solution is to be found in Two-Ocean Pass. Across this remarkable divide fish may easily make their way, and the Yellowstone Lake is unquestionably stocked from this direction. We thus have an example, probably without parallel, of an extensive body of water on the Atlantic slope stocked by Nature with fish from the Pacific."

The United States Fish Commission began to stock the Park streams in 1890. Now we find them abounding in Lake Trout, Brook Trout, Loch Leven, Silver Rainbow, Von Behn and Salmon Trout and Grayling.

The report has gone abroad that all the fish in the Yellowstone Lake are bad. Large numbers are diseased and unfit to eat, but the bad ones should be taken out; they are easily discovered so that the good of the catch are the only ones that go to the table, the others to the bears.

SNAKES—That the Yellowstone Park ever had a St. Patrick is not recorded, but the Park is on a par with Ireland when it comes to snakes. There are some lizards and frogs, but the snake family is meagerly represented by the harmless bull snake and the little water snake. Rattlesnakes apparently do not care for altitudes as they do not exist here; not one has ever been seen. Thus the reptile subject is disposed of in this brief paragraph.



Hotels

The hotels of the Yellowstone Park are owned and operated by the Yellowstone Park Association; they are built on ground owned by the United States and leased by the Government to the Yellowstone Park Association, but the Government has not, as many people suppose it has, any proprietary interest beyond the ground lease, and has nothing whatever to do with the management beyond the fixing of the rates. The Yellowstone Park Association is the sole party responsible.

There are five hotels and two lunch stations on the Circuit Drive; they are Mammoth Hot Springs Hotel at Mammoth Hot Springs; Norris Lunch Station at Norris Basin; Fountain Hotel at Lower Geyser Basin; Old Faithful Inn at the Upper Basin; Thumb Lunch Station at West Thumb Bay; Colonial Hotel at Lake Yellowstone; Cañon Hotel at the Grand Cañon.

MAMMOTH HOT SPRINGS HOTEL is superbly located on the plaza facing Fort Yellowstone, with scenic surroundings beyond compare; directly in front is the lawn and beyond it Capitol Hill; to the right the Terraces, and in the distance Bunsen Peak; to the left the military quarters, and over the red roofs the cliffs of Mount Everts. At the west end of the hotel are the stores and the only postoffice in the Park, and beyond it the village road leads past the old Cottage Hotel and the pretty residences with their little gardens, on up to the gulch and the formation; at the foot of the gulch is the first house and first hotel of the Park, Jim McCartney's.

Across the lawn are the residences of President Child of the Yellowstone Park Association, the captain of the Engineer Corps; Mr. F. Jay Haynes, President of the M-Y Co., and others. The officers of the garrison and the soldiers have their quarters east of the lawn, just on the brink of the plaza; north of these quarters are the Weather Bureau, warehouses and barns.

As the hotel is about to be rebuilt, a description of the house would be premature; suffice to say that it is three stories high, with a veranda extending its entire length; the ceilings are high and as a consequence the rooms are well ventilated, with great windows from ceiling to floor. There are electric lights and steam heat. The lobby, the halls, the dining-room and billiard-hall are spacious and well appointed, and with the alterations and rebuilding that are to come, the hotel will be all that can be desired.

In the Mammoth Hotel are the general offices of the Y. P. A., the Y. P. T. A., and the M-Y Co., the office of the superintendent of hotels and of the commissary department.

From this hotel all passengers entering by the North Gate at Gardiner take stages for the tour of the Park and from hence depart.

There are attractions sufficient to prolong the stay in the gay life and in the drives round about, to Golden Gate, around Bunsen Peak through Gardiner Cañon, to the Terraces and up the road towards Tower Falls.

THE LUNCH STATION at Norris Basin is a modest little cottage, not intended as a place to lodge, except by special arrangement, as there are only seven living-rooms. But as a feeding place it does the largest business of any place in the Park as it feeds all that are coming and all that are going out every

day, and the hours from 11:30 a. m. to 1:30 p. m. are busy ones. All stages stop an hour and a half, which gives ample time for a visit to the nearby geysers and hot springs.

If it has been your happy lot to lunch at Norris, you'll not forget it. Who ever could? And what's more, you'll tell your friends all about it, about the hot gingerbread and the sausage—yes, sausage in summer time, and the pie; these are reasons why you won't forget the lunch at Norris as you came in the Park, and why you will whet your appetite for another sausage and another slice of the gingerbread as you go out, and why you make the lunch at Norris a part of your Yellowstone story. Of course the linen was snowy white and the silver bright, and the girls that served; you may forget whether their dresses were white or pink or blue, but withal you'll not forget the lunch at Norris.

FOUNTAIN HOTEL, at the Lower Geyser Basin, is the first hotel for travelers entering the West Gate and the second for those from the North Gate. The house is a good one, and conveniently located in the midst of the Basin, so that some of the geysers may be seen from the front veranda of the hotel. There are electric lights and steam heat, with the cheerful accessory of a log fireplace in the lobby. The house is three stories, with

rooms light, cheery and well ventilated. The dining-room is particularly a cheerful one. It has been said that the walls of the rooms were tinted with material taken from the Paint Pots, and from their soft colors we may believe it.

The fine sulphur baths of the Fountain are in grateful remembrance of all who have had the good fortune to enjoy them; the water comes from one of the hot springs near the Paint Pots at an elevation sufficient to send the water to the bathrooms on the second floor of the hotel.

On the little rise of a hill in front of the hotel near the road, to be seen from the passing stages, are the Mammoth Paint Pots, Fountain Geyser, Clepsydra Spring and Sulphur Pool. Back of the hotel is a hot pool used as laundry



A TALLYHO.

boiler for the hotel linen. The Fountain is noted for its back-door boarders, the bears, that come from the forests on the east side of the rear of the house, one of the finest "zoos" in the Park.

About two miles south and east of the hotel is the Great Fountain Geyser and Fire Hole Lake, well worth the while of a visit, even if it requires a stop-over, as they are off the main road; there is nothing like the Fire Hole Lake in the world, and the Great Fountain Geyser is one of the finest. There is good fishing in the Madison and Fire Hole rivers and in Nez Percé Creek.

OLD FAITHFUL INN—Who shall describe this most charming, most unique, queer, quaint, fascinating place that is in a class by itself, with none other like it in all the world in its positive enchantment, without exhausting the visible supply of superlative adjectives in all the dictionaries of all languages of the earth? It hasn't been faithfully described yet, and there is no attempt to do it here.

The camera has failed utterly to produce a picture to do justice to Old Faithful Inn, and the artist to paint its logs and gables, quaint corners and cribs has not arrived; his name is not on the register, and he has not been found in the camps round about.

The house is built of unhewn logs, laid in the walls, as they came from the forests, with the bark on and unshaped save as with the ax that felled them.

The stairways have the steps of logs split in half with the flat side up; the banisters and newel posts are of knotted, gnarled and twisted branches of the native trees.

The galleries are supported by columns and braces cut from trees bent under the weight of snows and grown to fantastic shapes.

The verandas and porches have cribs of pine logs instead of columns, and the foundation stones, innocent of the stone-cutters' chisels, were rolled in from the woods with the lichen still on their rugged sides.

The doors are iron bound, hinges a yard long nailed on with spikes, locks and latches in pounds of iron and steel as relics of some old castle of feudal days.

Electric lights look like candles on a pine stick. Clothes hooks are wooden pins driven into the logs.

There is a bell on the roof with just a plain, everyday rope to ring it with when dinner's ready, and there are a hundred other things that look like they had been picked up in the woods and assembled here to add to the queerness, the quaintness, of the ensemble.

You can't call it a chalet, no Swiss ever dreamed of anything like this; nor yet a chateau, no Frenchman could think out one like it. The Alhambra has its graceful moorish arches and curious carvings, but Old Faithful has its logs and slabs.

Reamer was the architect and builder, and yet I believe if he went to other parts without his notes and plans he could not build another "Inn" just like Old Faithful.

Reau Campbell was the author; he gave his ideas and plans to build a house of logs from native trees to President Harry Child and United States Senator Tom Carter, and sent to them the first sketch of Old Faithful Inn from which more elaborate drawings were made.

Old Faithful Inn fronts the Upper Basin, so that from its windows every geyser, great and small, may be seen, and immediately on its right, close to the east side, spouts Old Faithful, faithfully every hour.

The Circuit Road passes by the front door, and there are other roads and paths threading in and out between the pools and craters, and to Klamers's

store, Haynes' studio, the patrol station, the river, to Wylie's and the camps, and to where the bears are.

After you have arrived and have for the moment somewhat recovered from the "ohs" and "ahs" of wonder and astonishment, you will find that with all these unique surroundings you have all the comforts and luxuries of the latter-day hotel, though the furnishing, the rugs on the floors, the curtains at the windows are in keeping with the logs and slabs. Here is where you will wish to stay all summer, and if you did, the long days would grow shorter and fly away quickly, for after you had wandered in the woods, been to Lone Star and Kepler's and seen all the big geysers, you could just sit in these easy



REAR OF OLD FAITHFUL INN.

rocking, hickory chairs on the porch, and breathe the ozone from the pines as you watched the more hurried ones come and go in the stages. In the evening you could sit by the great log fireplaces that are in the big stone chimney, eight of these, and watch the glow on happy faces while Joe popped the corn and passed it around in a tin dishpan, and perhaps you would wonder if Shakespeare, if he could come here, would not change his theme of a Midsummer Night's Dream.

THE THUMB LUNCH STATION is on the shore of West Thumb Bay of Lake Yellowstone, and your stage horses come down out of the woods almost at a gallop, come to the platform so quickly that you have hardly noticed the cozy little house where you are to eat, you were so busy looking at the beautiful

lake and the mountains. This is only a place to eat, no place to sleep, and everybody is so surprised at the bountiful service and excellent cuisine, and the meal is disposed of long before the hour-and-a-half stop is over.

The boat at the little wharf in front of the station will take you across the lake to the next hotel for a fare, or you may resume your seats in the stage.

THE COLONIAL HOTEL is at the Lake; it's a far cry from Old Faithful to here. When you have left the logs of that to come to the sleek and shiny façade of this, you will think you have awakened from a dream of olden days to find the spick and span of the modern.

It's a handsome house, is the Colonial, on the bluff above the blue waters of the Lake, with its stately columned porticos and wide verandas, and with its bright buff of walls and white of fluted columns.

The view from the Colonial is simply superb, looking over the Lake to the bluer mountains beyond all capped in snowy white, with their camel backs against the sky, a never-ending caravan that never passes by.

The Lake Hotel that has come to be called the "Colonial," though the old name hangs on to it, is a fine place to stay awhile, even if you didn't do anything but watch the people come in the afternoon and go away in the morning, a different crowd every day, and yet always the same, always in a hurry, never stopping to rest or to see anything.

But there is that which is more interesting; there are boats on the Lake for rowing or sailing, for going a-fishing or just lazily floating on the placid waters. You may fish till you are tired catching them, not waiting for them to bite; you don't have to hunt after frogs or dig bait, you just put a fly on a hook and the hook on a string, drop it in on the water, not in it, and there's your fish. Don't care for that, eh? Well, watch the others come in with their strings and you'll leave your easy chair to go and hear them tell their fish stories; you'll do that because you can't help it.

Then there are the bears, a grizzly and silver tip, and whole families of the others that come down to the back yard to get their dinners after you have had yours.

The Colonial is a splendid, modern hotel with the woods on each side and back of it, and the most beautiful lake in the world in front of it, and within its doors every comfort to be desired and good living withal. Oh! this is a good place to stop, to rest from your journey and from wonder seeing, and to prepare for the scenic grandeur to come when you start out again.

THE CAÑON HOTEL is a house that is set upon a hill and cannot be hid, so high on the hill that the red roof may be seen from ten miles up the road as you come down from the Lake, as from its high location there can be no intervening trees to obstruct the view.

The Cañon can make no claims to architectural beauty, but what it lacks in that is made up amply when you look from its windows or its veranda over the grandly beautiful landscape of mountains and meadows with only a white fleck of the foaming water of the Upper Falls dotted in.

The comforts within are in keeping with the excellence of all the others of the Park, and who dines at the Cañon dines well, and on the Cañon's beds the sleep of the just comes with no troubled dreams.

The drives and walks out from the Cañon are down the Grand Cañon of course, both sides, and to Mount Washburn and to the Upper and Lower Falls. Bears? yes, and deer feeding under the very shadow of the house. The Cañon Hotel is to be extended and practically rebuilt to give greater rooming capacity to accommodate the always increasing travel, and for the large number of travelers who desire to make a longer stay where there is so much of the magnificent in scenic grandeur.

Geysers

All over the area of the region of the Yellowstone Park and the borders of it there are geysers, terraces, springs, pools and paint pots, the result of escaping hot water and vapor, and in very many places where they do not now exist, they have boiled and spouted in the ages gone by, leaving their mark in the deadened vegetation, in a bleak "formation," uncanny caves and craters.

A geyser, so called from the Icelandic word *geysa*, to burst forth, to spout, is a water volcano on a more or less small scale that at regular or irregular intervals throws out volumes of hot water varying in intensity and violence, so that the columns of water are raised from ten to two hundred feet.

The boiling springs are in constant ebullition, sending out great quantities of hot water, but without the intermittent eruption peculiar to the geyser. The geyser is always a boiling spring but the boiling spring is not always a geyser.

The pools are placid ponds that seem to have little or no flow of water; a pool of an acre or more may have an overflow sufficient only to produce minute rivulets, and some discharge no water at all. From the viewpoint on the brink some have the most beautifully transparent colors; the water itself is colorless, perfectly clear, yet the deposit around them and beneath the surface is in varied hues of the most exquisite tints. Others are muddy, murky, ugly, but these are few.

Paint Pots are miniature volcanoes of boiling clay in white and varied tints of rose, pink, buff, blue, brown and cream. It is conceded that the paint pots are about the most appropriately named phenomenon in the Park. They do not have to be pointed out when the visitors come near them; the exclamation "Ah! the paint pots," is voluntary, for there is the boiling, bubbling paint, sure enough.

The mud volcanoes are the only things that have no claim to beauty; on the contrary, they are hideously repulsive, a seething, boiling, hissing cauldron of dirty water, so thick with mud that in their occasional eruptions plaster the crater sides and trees around with clods of—just mud. If there is a material hell, the mud volcano is a correct replica.

Terraces are formed by the deposit from the overflow of the hot springs; they form in the shape of bowls or platters, side by side and tier above tier, and in all colors and tints, as may be the composition of the water flowing over them to produce a white, cream, corn, red, purple, green and gold, producing an effect of royal hues.

When the water has ceased to flow over the terraces the beautifully tinted stalactites that hang from the terraces lose their lovely colors and turn to an ashen pale.

The Formation is that hard, barren, sandy surface around the geysers where they are and where they have been, oft extending over the entire basin, treeless and cheerless.

A Basin is that region immediately surrounding a number of geysers, pools and paint pots.

We will enumerate and give the chief characteristics of the geysers, terraces, paint pots and pools as they come in their order after entering at Gardiner, the North Gate, the different geysers, etc., being noted alphabetically.

At Mammoth Hot Springs there are no active geysers, but numerous craters and cones of those long ago extinct; but what is lacking in this respect is more than made up in the wonderful hot springs and the magnificently beautiful terraces.

You may walk or you may ride to the terraces; if you walk you must be equal to a climb of three hundred feet or more in a distance of more than a mile, but it is worth it, and you will do well to pay attention to the porter's cry of "All aboard for the Formation."

If you walk, a guide accompanies you; if you ride, the driver imparts the necessary information, and either will point out Liberty Cap, the Devil's Thumb and other extinct cones, Cleopatra, Jupiter, Pulpit, Hymen, Narrow Gauge, and Angel Terrace, the Mammoth Hot Springs, Cupid's Cave, the



WAPITI INN, CODY ROAD.

Devil's Kitchen, Stygian Cave, McCartney's Cave, in some of which are dangerous gases, for which the Stygian is most noted.

The great terraces are in full view from the hotel and rise nearly four hundred feet above it. Standing a silent sentinel by the roadside is the Liberty Cap, an extinct cone nearly forty feet high with a diameter of nearly twenty-five feet. A little further up the terrace side is another one called the Devil's Thumb. All have their names indicated on tablets planted near by.

NORRIS GEYSER BASIN.

ARSENIC—Inactive.

BLACK GROWLER—Throws out little water, but immense columns of steam, with a constant roaring. The deposit is black, hence the name.

CONGRESS—Inactive; came into existence in 1893 coincident with the 53d Congress, which was equally inactive with regard to its Park promises.

CONSTANT—Sometimes called The Minute Man, earns its title well, as it is almost always in a state of eruption to a height of 25 to 30 feet.

DEVIL'S INK STAND—Irregular eruptions of inky looking water.

- ECHINUS**—Height 20 feet when it plays, which is rarely. Named by the U. S. Geological Survey.
- FEARLESS**—Inactive; was named by Colonel Norris.
- FISSURE**—Height 100 feet, duration 20 minutes. Interval between eruptions, two hours. Lately grown irregular. Named by the U. S. Geological Survey.
- MINUTE MAN**—At one time played a stream 10 to 15 feet high every minute; now not so regular, but approaching its name given by Colonel Norris.
- MONARCH**—A fine geyser when it is in eruption, which a short time ago was at intervals of about twelve hours, throwing water 75 to 100 feet, but it has now become very irregular.
- MUD GEYSER**—An insignificant pool of dirty water that boils violently at short intervals.
- NEW CRATER**—Eruptions at short intervals, height 10 to 15 feet.
- PEARL**—Inactive.
- PEBBLE**—Irregular and uncertain in its action.
- VIXEN**—Unimportant, but still a geyser of small activity.
There are sundry other pools and near-geysers at Norris among which is Emerald Pool, but scarcely worthy of the name. Signs are placed near each one, giving the name, etc.

LOWER GEYSER BASIN.

- BEAD**—So called by Comstock on account of its beautifully beaded tube.
- CAT FISH**—Named by U. S. Geological Survey without giving any reason for so doing.
- CLEPSYDRA**—Named by Comstock for the ancient water clock that marked the time by the passage of water.
- EGG SHELL**—An exquisite little bit near the Great Fountain, fully described by its name.
- FIRE HOLE LAKE**—Unique, in a class by itself, Fire Hole Lake is the only one of its kind in the Park and perhaps in the world; a placid lakelet, half a mile east of the Great Fountain Geyser, from its depths come great globules of blue flames, some only a few inches, others three feet in height, apparently flames of sulphur constantly burning in the deep waters.
- FITFUL**—Little more than an intermittently boiling spring.
- FOUNTAIN**—One of the prettiest geysers in the Park. Its eruptions are fairly regular at intervals of three to four hours, sending a column of water 70 to 75 feet continuing 15 to 20 minutes.
- GRAY BULGER**—An ambitious name for a one-foot geyser.
- GREAT FOUNTAIN**—About two miles from the Fountain Hotel and a mile off the main road southward. One of the very finest geysers in the Park. Eruptions every eight to ten hours, throwing water 100 feet high. The entire volume of water in the crater is thrown out in the 20 to 25 minutes of the action. The Great Fountain Geyser is the one that must not be missed.
- JET**—A minor geyser of irregular eruptions to 15 feet.
- MAMMOTH PAINT POTS**—Most appropriately named; boiling clay in beautiful colors from a pinkish white to terra cotta; just east of the Fountain Geyser, a few hundred yards south of the hotel. May be seen from the passing stages.
There are other paint pots, notably at the edge of the Gibbon Meadows and at the Thumb Lunch Station.

PINS CONE—Inactive.

ROSETTE—Inactive.

STEADY—Inactive.

SURPRISE—May be made to boil by throwing in a handful of geyser sand. Near the Great Fountain.

WHITE DOME—Is a white cone near the road to the Great Fountain; faintly emits steam, with an occasional eruption of 10 to 15 feet.

The other geyserettes of the Lower Basin are the Black Warrior, Mushroom, Young Hopeful, and many others that are nameless. In the rear of the Fountain Hotel is a hot pool sometimes used as boiler for the hotel linen. The Sulphur Spring near the Paint Pots supplies the water for the hotel baths.

MIDWAY GEYSER BASIN.

Is midway between the Lower and Upper Geyser Basins; it has no active geysers but the greatest crater and the finest pools and lakelets in the Park.

EXCELSIOR GEYSER—Was at one time the greatest geyser on earth, but it has been inactive since 1888. The crater as it is now, is more than 20 feet deep with an area of 200 by 330 feet, discharging 4,000 gallons of water per minute. This is in reality a water volcano as it ejected large rocks during its last eruptions in 1888, when it forced out a part of the crater next the Fire Hole River and raised the water of that river some four inches during the action which continued at short intervals for some weeks. The height of the water ejected was from 200 to 250 feet.

PRISMATIC LAKE—Near Excelsior crater; is a very beautiful pool tinted in prismatic hues, the colors blending one into another in bands from the outer rim to the center, the overflow forming minute terraces in the richest tints of red, yellow and brown; even the vapor rising from the pool bears a tinge of color. The pool has an area of 250 by 400 feet.

TURQUOISE SPRING—Is near by and its name indicates its color, a beautiful turquoise blue. Near to these two pools is another of the very many wonders of this region, a spring of clear cold water, not pleasant to the taste, but as cold as the others are hot.

UPPER GEYSER BASIN.

The greatest of all the geyser basins of the world is the Upper Geyser Basin of the Yellowstone Park, where there are more geysers, greater geysers and more beautiful geysers than in all the others combined.

ARTEMESIA—Plays at intervals of two or three days. Height of eruption 100 feet, duration 10 minutes.

ATOMIZER—Irregular; 20 feet; duration 10 minutes.

BEE HIVE—But for its irregularity and consequent disappointments, the Bee Hive could be written down as the finest geyser in the world. The name is taken from the shape of the crater, which is like the old-fashioned beehive, and the cone is not much larger. The tube of the cone is about 18 inches in diameter and when the geyser is in action this tube is completely filled with the gushing stream and sent out with such a force that a solid jet will sometimes reach a height of 200 feet, like the force from the nozzle of a mammoth fire engine. The Bee Hive is extremely irregular; sometimes it will play three times in a day and then remain inactive for weeks.

- BIJOU**—Inactive.
- BULGER**—A small, irregular geyser.
- CASTLE**—Was named by the Washburn party from the fancied resemblance to the ruins of a castle wall. Height of eruption 100 feet, at intervals of 24 to 36 hours.
- CHINAMAN**—Only a pool that took its name from a Chinaman who used it for a laundry boiler in which he dropped his soap one day and caused an eruption. This started the idea of "soaping a geyser" to hasten action.
- COMET**—Irregular; spurts sometimes to the height of 50 feet.
- CUBS**—See **LION**.
- ECONOMIC**—A geyser that plays up to 20 feet and loses no water; there is no overflow. Irregular in action, duration 15 to 20 minutes.
- FAN**—On the banks of the Fire Hole River near Riverside Bridge. Fan-shape eruptions occur about every eight hours, duration 10 to 15 minutes, height 15 to 20 feet.
- GIANT**—As its name implies, it is of gigantic proportions. There is a cone some 10 feet high, broken down on one side. The Giant plays at intervals of seven to nine days, sending a stream of water 200 to 250 feet in the air and continuing from an hour and a half to two hours.
- GIANTESS**—Is another of the big ones playing about every two weeks, to a height of 250 feet for 12 hours.
- GRAND**—Plays every eighteen to twenty days, 250 feet, but only 20 minutes to a half hour.
- GROTTO**—Aptly named from its fantastic shape. Eruptions about every four hours for a half to three-quarters of an hour.
- JEWELL**—Plays every 30 to 50 minutes to a height of 30 to 40 feet.
- LION**—The Lion, Lioness and Cubs are, very properly, in a group. The Lion is the greatest in eruptions, sometimes to a height of 50 feet, once in twenty-four hours for 20 minutes; the Cubs often play at the same time, the Lioness rarely.
- LIONESS**—See **LION**.
- LONE STAR**—Not properly in the Upper Basin but about four miles east. There is a cone like an immense thimble with a central tube surrounded by a score of little apertures as if the thimble had worn through. Eruptions from 40 minutes to 2 hours, duration 10 to 15 minutes. It is a curious geyser, prettily located in the forest.
- MODEL**—A small imitation of the real thing.
- MORTAR**—Plays 5 to 10 minutes, 25 to 30 feet, at intervals of two to three hours.
- OBLONG**—Has a beautiful crater in oblong shape. Plays irregularly for a few minutes at intervals from a few hours to two or three days; height 30 to 40 feet.
- OLD FAITHFUL**—Called the Guardian of the Valley. True to its name, playing at intervals of 65 to 70 minutes, varying little either way; there are never any disappointments, or impatient waitings on Old Faithful. Height from 125 to 160 feet, duration 10 to 15 minutes.
- PUNCH BOWL**—A continuously boiling spring with a most beautifully colored bowl.
- RESTLESS**—Little more than a boiling spring.
- RIVERSIDE**—With its crater on the riverside is counted as one of the prettiest geysers, as its tube is at an angle that it throws the water over the river to a height of 80 to 100 feet for 15 minutes at almost regular intervals of eight hours.
- SAWMILL**—Plays at frequent intervals with a sawmill motion and sound. Height about 30 feet.

SENTINEL—Irregular action of about 20 feet.

SPASMODIC—Named for the character of its action, which is mild.

SPLENDID—Has great claim to its name; the eruptions reach 200 feet at intervals most irregular, from a few hours to two or three days. Duration 10 to 15 minutes.

SPONGE—Has a mound-like crater with great resemblance to a sponge. Action occurs irregularly.

SURPRISE—An irregular geyser that plays up to 100 feet for 15 to 20 minutes.

TURBAN—So called from a fancied resemblance to a turban; has frequent eruptions up to 35 feet, lasting 15 to 20 minutes.

YOUNG FAITHFUL—Was named by the Earl of Dunraven. Irregular.

SHOSHONE GEYSER BASIN.

BRONZE—So called on account of the luster of the water.

UNION—A group of three geysers in the Shoshone Basin; No. 1 is the North Cone in eruption every 5 hours, 110 feet, for 60 minutes; No. 2, the middle geyser, 60 feet; No. 3, South Cone, is unimportant, being little more than a boiling spring.

SHIELD—Inactive.

HEART LAKE GEYSER BASIN.

DELUGE—Irregular eruptions up to 15 feet.

RUSTIC—Plays frequently with 5 minutes duration up to 40 feet. Surrounded by logs that were placed there by Indians so long ago that they are incrustured with the formation.

SPIKE—Inactive.

FISSURE—Is a group of hot springs.

GEYSERS OF OTHER LANDS.

Besides these in the Yellowstone Park the only real geysers are found in Iceland and New Zealand, and they are not to be compared with the real thing—the homegrown geyser of this Wonderland of the World. Then there are geysers in California, New Mexico and Mexico, some insignificant boiling springs with an occasional steam jet, a sort of teapot tempest, that's all.

In Iceland near Hecla and Reykjavik, the chief towns, are the principal geysers of that country, called by the natives, *geysa* (to spout, to erupt). The Great Geysa and the Great Stokkr are the only ones worthy of mention; the Great Geysa has a crater within a cone about 20 feet high, with a diameter of 50 to 60 feet. The eruptions are irregular, occurring every 24 to 36 hours, sending a jet of hot water and steam from 60 to 200 feet, according to the force of eruption, lasting 5 to 10 minutes.

The Great Stokkr, from the Icelandic word *stroka*, has a crater 8 feet in diameter, producing an eruption at intervals of 6 to 10 hours, throwing hot water to a height of 40 to 150 feet. All about these geysers are boiling springs and lakelets of beautifully colored water, and other little geysers.

The New Zealand geysers are on the island of New Ulster, near the Volcano of Tongariro, where there are more than a thousand geysers and geyserettes; the most remarkable is Tetrata, in the center of a beautiful formation of terraces, but it is little more than a boiling spring and can hardly be called an active geyser.

In many parts of these countries and in the United States are weak imitations of the geysers, lakes, springs, paint pots and pools as they exist in the Yellowstone Park, where the only originals exist.

Climate

The Yellowstone Park has never posed as a winter resort, but if it were not for its snows preventing getting about, it might so pose from the healthful standpoint. It is never as cold as is the popular idea of a place where the snows are from ten to twenty feet deep.

But "in the good old summer time" the Park climate is ideal; the absolute purity of the atmosphere is its chief charm, seldom equaled and never surpassed. The mean annual range of the thermometer in the Yellowstone Park is from ten to fifteen degrees lower than in the cities of the north, as New York, Chicago, St. Louis, etc., there being no extremes at any season.

In the sun at noonday there is more than a comfortable warmth, but in the shade it is always delightfully cool. The mornings and evenings are cool, chilly sometimes, but never cold, though even in midsummer the great log fires at the Fountain and Old Faithful are of good cheer; and at Mammoth Hot Springs, the Lake and the Cañon when the steam heat is turned on some summer evenings, there is a grateful feeling for the man that turned it on.

There are more clear, sunshiny days in summer than in winter. There are summer showers that go as quickly as they come, but rarely a succession of rainy days.

Sometimes there may be hail or even sleet and snow, but in an hour it is gone, and when one considers the benefit accruing to the roads, the momentary shiver is forgotten in the warmth of one's gratitude. All in all, the climate of the Yellowstone Park is far from the least of its attractions, in fact, it is in the front rank with its wonders and beauties.



NORTHERN PACIFIC TRADE MARK IN THE CREEK.

Altitudes

MOUNTAIN RANGES, PEAKS, BUTTES, RIDGES, PASSES, AND LAKES.

Abiathar Peak... 10,850	Index Peak..... 11,790	Mountain Passes
Absaroka Range .. 7,000 to 12,000	Joseph Peak..... 10,350	Craig Pass..... 8,350
Amethyst Mtn... 9,473	Junction Butte... 6,650	Jones Pass. 9,500
Antler Peak..... 10,250	Lake Butte..... 8,650	Norris Pass. 8,310
Atkins Peak..... 10,950	Landmark, The... 8,850	Raynolds Pass... 6,961
Avalanche Peak... 10,550	Langford Mt..... 10,650	Sylvan Pass..... 8,700
Bannock Peak... 9,550	Mary Mtn..... 8,550	Lakes
Baronett Peak... 10,350	Moran Mt..... 12,850	Beach Lake. 8,200
Big Game Ridge .. 9,900	Needles, The.... 9,650	Beaver Lake.... 7,455
Birch Hills..... 7,350	Norris Mt..... 9,950	Beula Lake..... 7,580
Bison Peak..... 8,850	Observation Peak 9,350	Bridger Lake.... 7,950
Bobcat Ridge.... 9,550	Obsidian Cliff... 7,850	Delusion Lake... 7,850
Bunsen Peak..... 9,150	Paint Pot Hill. . 7,950	Dryad Lake..... 8,300
Cathedral Peak... 10,650	Pelican Cone.... 9,630	Duck Lake..... 7,900
Chittenden Mt... 10,150	Pilot Knob..... 12,027	Fern Lake..... 8,200
Cinnabar Mtn... 7,050	Pinion Peak..... 9,650	Frost Lake..... 7,400
Colter Peak..... 10,550	Prospect Peak... 9,350	Gallatin Lake... 9,050
Crags, The..... 9,050	Pyramid Peak... 10,350	Goose Lake..... 7,150
Crescent Hill.... 7,950	Quadrant Mtn... 10,250	Grassy Lake.... 7,200
Crow Foot Ridge. 9,750	Red Mt. Range... 10,000	Grebe Lake..... 8,000
Doane Mt. 10,550	Reservation Peak 10,650	Grizzly Lake.... 7,540
Druid Peak..... 9,650	Roaring Mtn.... 8,050	Heart Lake..... 7,519
Dunraven Peak... 9,750	Saddle Mtn..... 11,150	Henry Lake..... 6,493
Eagle Peak..... 10,850	Schurz Mtn..... 9,550	Hering Lake.... 7,580
Echo Peak..... 9,650	Sepulcher Mtn... 9,550	Indian Pond.... 7,800
Electric Peak... 11,205	Sheepeater Cliff. 7,550	Isa Lake..... 8,300
Elephant Back... 8,650	Sheridan Mt.... 10,300	Jackson Lake... 6,050
Everts Mt..... 7,950	Signal Hills.... 9,550	Leigh Lake..... 7,700
Factory Hill.... 9,550	Silver Top Peak. 10,450	Lewis Lake..... 7,770
Flat Mtn..... 9,050	Specimen Ridge.. 8,750	Loon Lake..... 6,450
Folsom Peak.... 9,350	Stevenson Mt... 10,350	Lost Lake..... 8,550
Forellen Peak... 9,750	Storm Peak.... 9,550	Madison Lake... 8,300
Gallatin Range .. 9,900	Survey Peak.... 9,250	Mallard Lake... 8,050
Garnet Hill..... 7,050	Table Mtn..... 10,850	Mary Lake..... 8,150
Giant Castle.... 10,050	Tetone Mtn..... 8,150	Mirror Lake.... 8,750
Gibbon Hill.... 8,650	Teton, The G'nd. 13,741	Obsidian Lake... 7,700
Gravel Peak.... 9,650	Three Rivers Peak 9,950	Riddle Lake.... 8,000
Gray Peak..... 10,300	Thunderer, The.. 10,450	Shoshone Lake... 7,790
Grizzly Peak.... 9,700	Top Notch Peak.. 10,050	Summit Lake... 8,500
Hancock Mt.... 10,150	Trident, The.... 10,050	Swan Lake..... 7,250
Hawks Rest..... 9,850	Trilobite Point.. 9,950	Sylvan Lake.... 8,350
Hedges Peak.... 9,550	Turret Mt..... 10,450	Tern Lake..... 8,200
Homes Mt..... 10,350	Twin Buttes.... 8,450	Trout Lake.... 6,900
Horseshoe Hill... 8,250	Washburn Mt... 10,350	Turbid Lake.... 7,850
Hoyt Mt..... 10,450	White Peak.... 9,850	Twin Lakes.... 7,500
Huckleberry Mt.. 9,750	Wildcat Peak.... 9,850	Wapiti Lake.... 8,550
Humphreys Mt.. 11,050	Yount Peak..... 12,250	White Lake.... 8,200
Huntley Mt.... 9,950		Woods, Lake of the 7,500
		Yellowstone Lake 7,791



RAILWAY APPROACHES YELLOWSTONE PARK.

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